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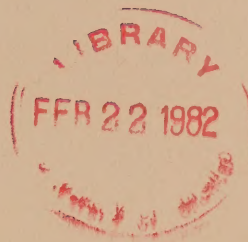


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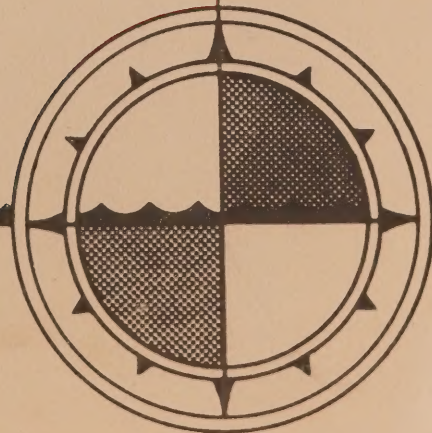
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OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P
4 May - 21 June 1979
VOLUME 100



INSTITUTE OF OCEAN SCIENCES
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Pacific Marine Science Report 81-14

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CONTENTS

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Institute of Ocean Sciences

Sidney, B.C.

1981

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ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weather ship at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including surface observations and profiles obtained with bottle casts and conductivity-temperature-pressure instruments.

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INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude $50^{\circ}00'N$, Longitude $145^{\circ}00'W$) was inaugurated in December 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959 by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at $40'$, i.e. $139^{\circ}40'W$, $141^{\circ}40'W$, etc. These stations are known as Line P BT stations. Data observed prior to 1968 have been indexed by Collins et al (1969).

The present record includes hydrographic, continuously sampled STD and surface salinity and temperature data collected from the CCGS Quadra during the period 4 May - 21 June 1979.

All physical oceanographic data have been stored by the Marine Environmental Data Services Branch (MEDS), Department of Fisheries and Oceans, 240 Sparks Street, 7th Floor West, Ottawa, Ontario, Canada, K1A OE6. Requests for these data should be directed to MEDS.

Biological and productivity data are published in the Manuscript Report series of the Department of Fisheries and Oceans (DFO), Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to DFO.

Marine geochemical data are for the Ocean Chemistry Division, Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, B. C., Canada, V8L 4B2.

PROGRAM OF OBSERVATION FROM CCGS QUADRA, 4 May - 21 June 1979 (P-79-4)
(MEDS Ref. No. 15-79-004)

Oceanographic observations were made by Ms. G. Jewsbury.

En Route to Station P (Line P)

STD profiles were taken at Line P stations 1, 2, 3, 6, 7 and 12.

At station 6 and 12 a hydrocast was also made to 1500 metres for temperature, salinity and oxygen.

Surface salinity and nutrient samples were taken from the seawaterloop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawaterloop) were run continuously.

Mechanical BT's or XBT's were taken at all BT positions.

On Station P

The oceanographic program was carried out as follows:

Physical Oceanography:

- 1) 3 hydrocasts to 4200 metres for temperature, salinity and oxygen.
 1 hydrocast to 1500 metres for temperature, salinity and oxygen.
 2 hydrocasts to 1200 metres for temperature, salinity and oxygen.
- 2) 37 STD profiles were taken at Station P
 15 STD profiles were taken at MILE GRID positions.
- 3) Daily salinity samples were taken from the seawaterloop at 0000 hrs GMT.
- 4) BT's were taken every 3 hours to coincide with meteorological observations and encoded and transmitted according to the IGOS format. XBT's were taken on days of rough weather.

Marine Geochemistry

Samples for Air, CO₂, PCO₂, POC, alkalinity, nutrients and tritium obtained during this cruise are for the Ocean Chemistry Division and are not included in this data report.

Biological Oceanography

Samples from 150 metre vertical plankton hauls (Station P) and nutrients (Line P) obtained during this cruise are for the Pacific Biological Station and are not included in this data report.

En Route from Station P (Line P)

STD profiles were taken at Line P station 12 and 10 to 1.

At stations 12 and 4 a hydrocast was also made to 1500 metres for temperature, salinity and oxygen.

Surface salinity and nutrient samples were taken from the seawaterloop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawaterloop) were run continuously.

Mechanical BT's or XBT's were taken at all BT positions.

Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. M. Bigg, Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, British Columbia, Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiguet, Curator of Birds and Mammals, Provincial Museum, Department of Provincial Secretary and Travel Industry, Victoria, British Columbia, Canada.

OBSERVATIONAL PROCEDURES

Observations for salinity, oxygen and temperature from all hydrographic casts, including the surface, were obtained with Niskin water sample bottles equipped with either Richter and Wiese and/or Yoshino Keiki Co. reversing thermometers. Two protected thermometers were used on all bottles and one unprotected thermometer was used on each bottle at depths of 300 metres or greater. The accuracy of protected reversing thermometers is believed to be $\pm 0.02^{\circ}\text{C}$.

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of $\pm 0.1^{\circ}\text{C}$ accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a 'b' in this data record.

Salinity determinations were made aboard ship with either an Autolab Model 601 Mark III inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be $\pm 0.003^{\circ}/\text{oo}$.

Depth determination were made using the "depth difference" method described in the U.S.N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of ± 5 metres for depths less than 1000 metres, and $\pm 0.5\%$ of depth for depths greater than 1000 metres.

The dissolved oxygen analyses were done in shipboard laboratory by a modified Winkler method (Carpenter, 1955).

Line P engine intake continuous temperature on both ships was recorded by a Honeywell Elektronik 15 Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be $\pm 0.1^{\circ}\text{C}$.

Each ship is equipped with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be $\pm 0.1^{\circ}\text{C}$ for temperature and ± 0.1 ‰ for salinity.

STD profiles were taken with a Guildline Model 7800 STD system.

COMPUTATIONS

All hydrographic data were processed with the aid of a UNIVAC 1100 computer. Reversing thermometer temperature corrections, thermometric depth calculations and accepted depth from the "depth difference" method were computed. Extraneous thermometric depths caused by thermometer malfunctions were automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity and dissolved oxygen vs \log_{10} depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolas interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog traces from the salinity-temperature-pressure instrument have been digitized using a Hewlett-Packard (HP) 9821A calculator and an HP 9864A digitizer, then replotted by an HP 9862A plotter. Digitization was continued until original and computer plotted traces were coincident.

The HP 9821A was then connected to an HP 2116 minicomputer and the digitized data transferred to 9-track tape. Using a UNIVAC 1106 computer the data was listed and obvious spikes removed, then a correction was applied.

Temperature and salinity values were listed at standard pressures and plotted using a Houston Complot DP8S Plotter

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)

DEPTH	is reported in metres
SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)
SVA (THETA)	is potential specific volume anomaly
DELTA D	is geopotential anomaly (J/kg)
POT EN	is potential energy in units of 10^8 ergs/cm ²
OXY	is the concentration of dissolved oxygen expressed in millilitres per litre
SOUND	is the velocity of sound in m/sec

Data were processed for publication by Messrs. C. de Jong, B. Minkley, and J. Linguanti.

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- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. *Limnol. and Oceanogr.* 10, 141-143.
- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. *Fish. Res. Bd. Can. Tech. Rept. No. 106.*
- MacNeill, M., 1977. A study of anomalous salinity and oxygen values in the deep water at Ocean Station P from 1960-1976 (unpublished manuscript). *Pacific Marine Science Report* 77-9.
- Reiniger, R.F. and C.K. Ross, 1968. A method of interpolation with application to oceanographic data. *Deep Sea Res.* 15, 185-193.
- U.S.N. Hydrographic Office, 1955. *Instruction Manual for oceanographic observations.* Publ. No. 607.

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast (m)	Comments
001	1	05/05/79	0015	100		} Line P
002	2	05/05/79	0147	102		
003	3	05/05/79	0347	1200		
004	6	05/05/79	1536	1400		
005	6	05/05/79	1645		1500	
006	7	06/05/79	0012	1400		
007	12	07/05/79	0639		1500	
008	12	07/05/79	0817	1400		
009	P	07/05/79	1715	1400		
010	P	07/05/79	2050	1400		
011	P	08/05/79	1730	1400		
012	P	08/05/79	1800		1500	T,S,O ₂
013	P	11/05/79	1723	1400		
014	P	12/05/79	1715	1400		
015	P	13/05/79	1715	1400		
016	P	14/05/79	1716	1400		} MILE grid
017	E3	14/05/79	1930	300		
018	E4	14/05/79	2115	300		
019	C1	14/05/79	2325	300		
020	W4	15/05/79	0130	300		
021	W3	15/05/79	0252	300		
022	P	15/05/79	1715	1400		
023	P	15/05/79	1835		1200	T,S,O ₂
024	P	16/05/79	1725	1400		
025	P	18/05/79	1735	1400		
026	P	19/05/79	1715	1400		
027	P	20/05/79	1735	1400		
028	P	22/05/79	1730	1400		
029	P	22/05/79	1915		1200	T,S,O ₂
030	P	23/05/79	1720	1400		
031	P	24/05/79	1715	1400		
032	P	25/05/79	1715	1400		
033	P	26/05/79	1726	1400		
034	P	27/05/79	1720	1400		
035	P	28/05/79	1720	1400		
036	P	29/05/79	1720	1400		
037	P	29/05/79	1815		4200	T,S,O ₂
038	P	30/05/79	1841	1400		} MILE grid
039	E3	30/05/79	2036	300		
040	E4	30/05/79	2215	300		
041	C1	30/05/79	2346	300		
042	W4	31/05/79	0129	300		
043	W3	31/05/79	0256	300		
044	P	01/06/79	1720	1400		
045	P	02/06/79	1720	1400		
046	P	03/06/79	1722	1400		
047	P	04/06/79	1716	1400		
048	P	04/06/79	1830		4200	T,S,O ₂
049	P	05/06/79	1715	1400		
050	P	06/06/79	1715	1400		

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS (continued)

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast (m)	Comments
051	P	07/06/79	1715	1400		
052	P	08/06/79	1710	1400		
053	P	10/06/79	0200	1400		
054	P	10/06/79	1710	1400		
055	P	11/06/79	1720	1400		
056	P	11/06/79	1835		4200	
057	P	13/06/79	1722	1400		} MILE grid
058	E3	13/06/79	2001	300		
059	E4	13/06/79	2324	300		
060	C1	14/06/79	0204	300		
061	W4	14/06/79	0341	300		
062	W3	14/06/79	0621	300		
063	P	14/06/79	0745	1400		
064	P	14/06/79	1720	1400		
065	P	15/06/79	1725	1400		
066	P	15/06/79	1920		250	T,S,O ₂ KAHN samples
067	P	16/06/79	1725	1400		
068	12	17/06/79	1717	1400		} T,S,O ₂ Line P
069	12	17/06/79	1830		1500	
070	10	18/06/79	1020	1400		
071	9	18/06/79	1722	1400		
072	8	18/06/79	2227	1400		
073	7	19/06/79	0440	1400		
074	6	19/06/79	1108	1400		
075	5	19/06/79	1712	1400		
076	4	19/06/79	2045	1400		
077	4	19/06/79	2130		1500	T,S,O ₂
078	3	20/06/79	0126	1200		
079	2	20/06/79	0240	100		
080	1	20/06/79	0517	100		

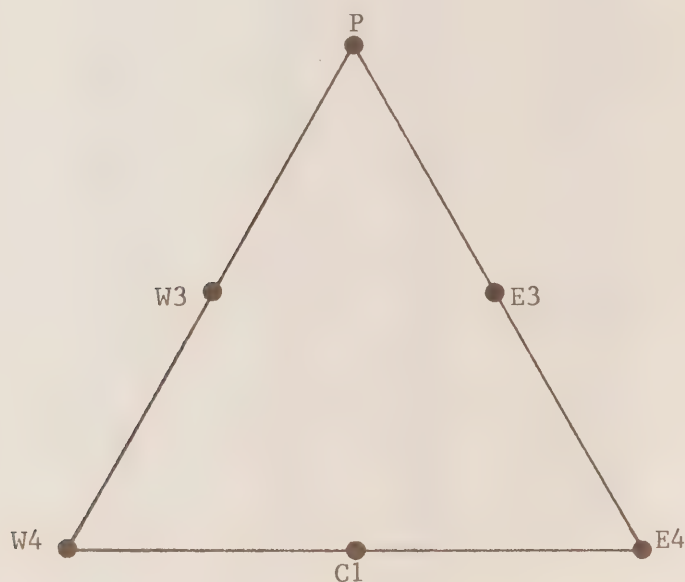
MILE GRID

(MIXED LAYER EXPERIMENT)

During the MILE experiment in the summer of 1977 a 20-mile triangular grid was initiated with STD stations to 300 metres.

During this cruise the grid survey was completed three times.

1st - STD consec. #016 - #021
 2nd - STD consec. #038 - #043
 3rd - STD consec. #057 - #063



Station ID and positions are as follows:

P = 50°00'N, 145°00'W
 E3 = 49°52'N, 144°52'W
 E4 = 49°43'N, 144°44'W
 C1 = 49°42'N, 145°00'W
 W4 = 49°43'N, 145°15'W
 W3 = 49°52'N, 145°07'W

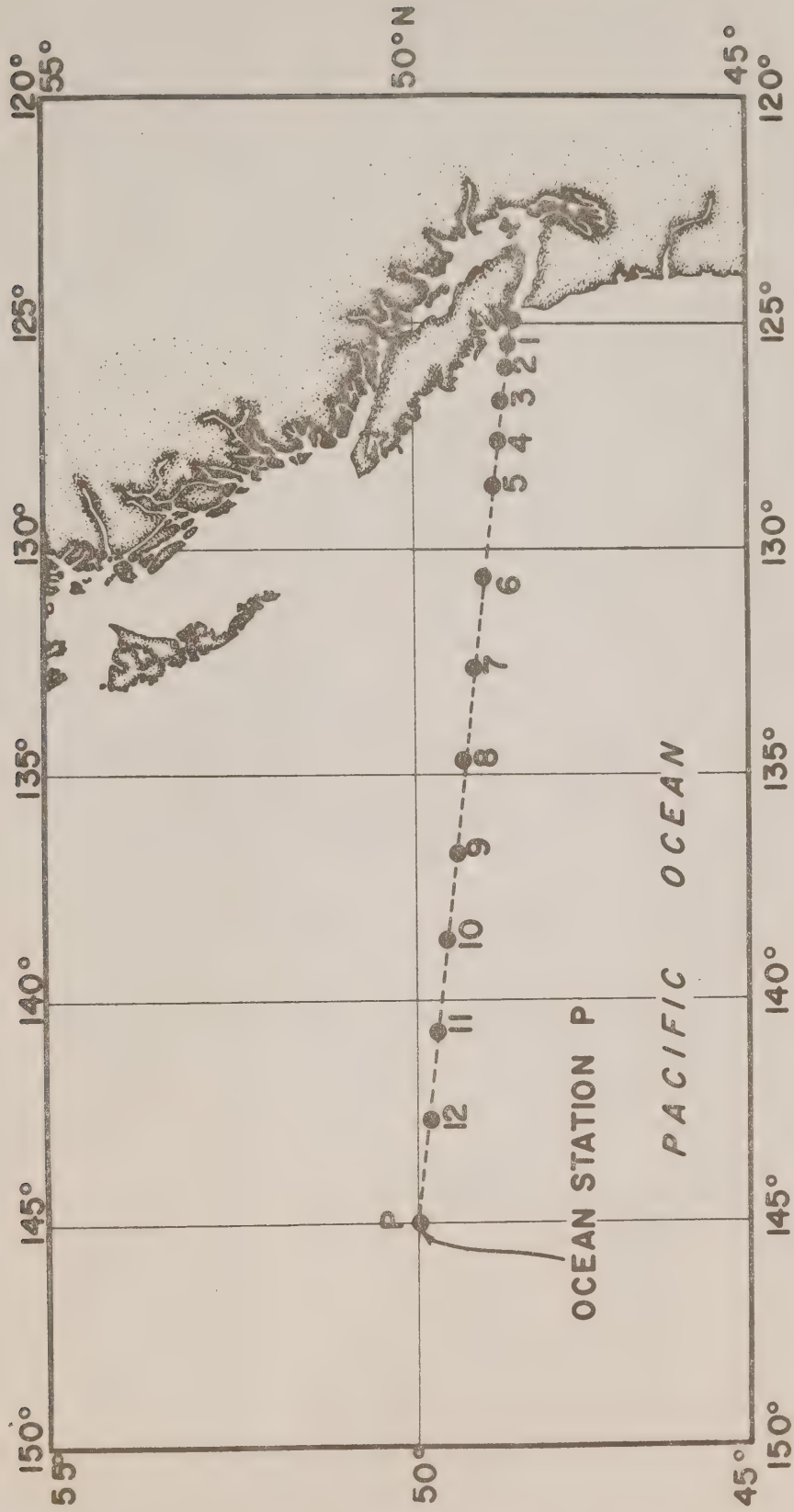


Fig. 1 Chart showing Line P station positions.

Oceanographic Data Obtained on Cruise P-79-4

(MEDS Reference No. 15-79-004)

Results of Hydrographic Observations

(P-79-4)

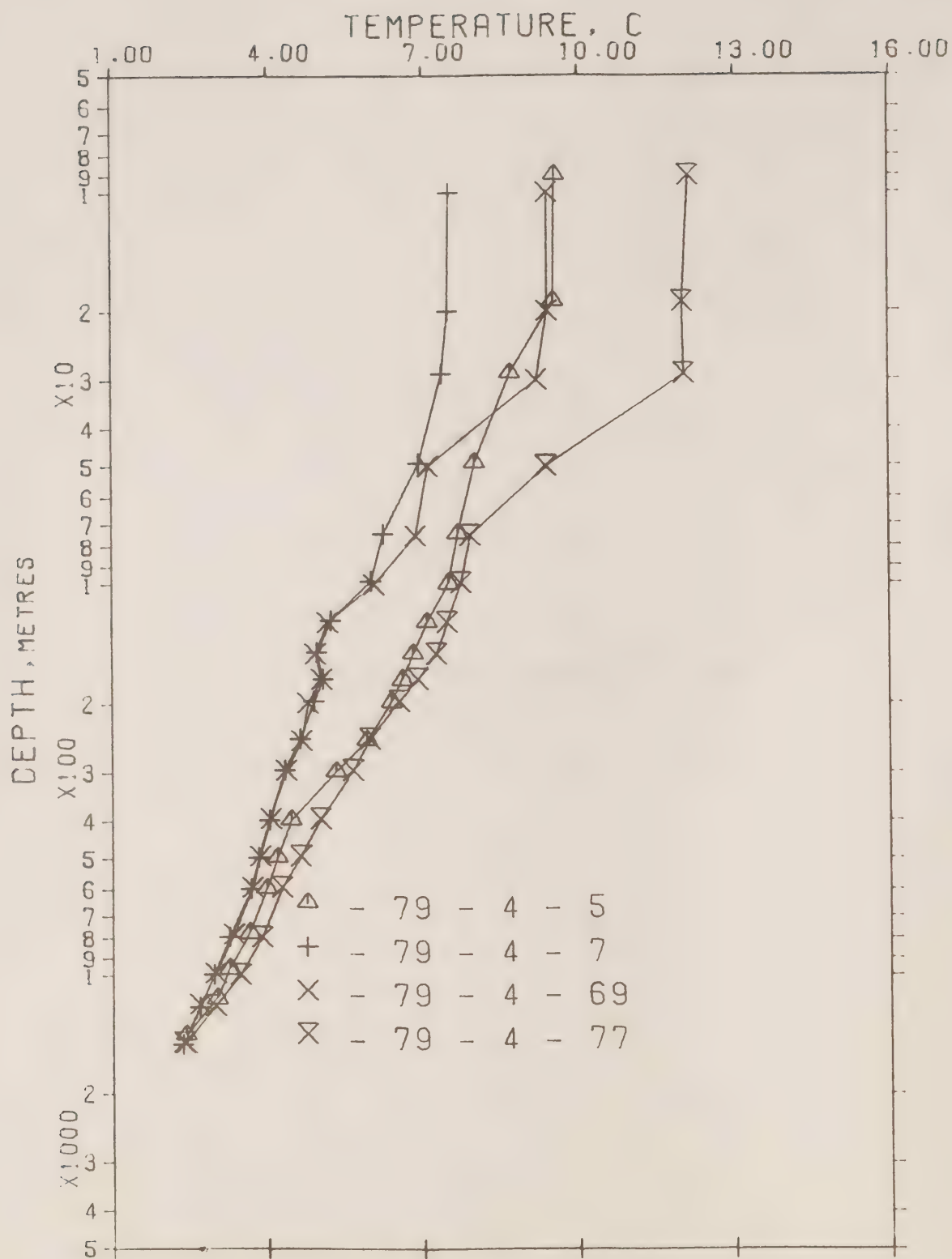


Figure 2. Composite plot of temperature vs \log_{10} depth for Line P Stations.

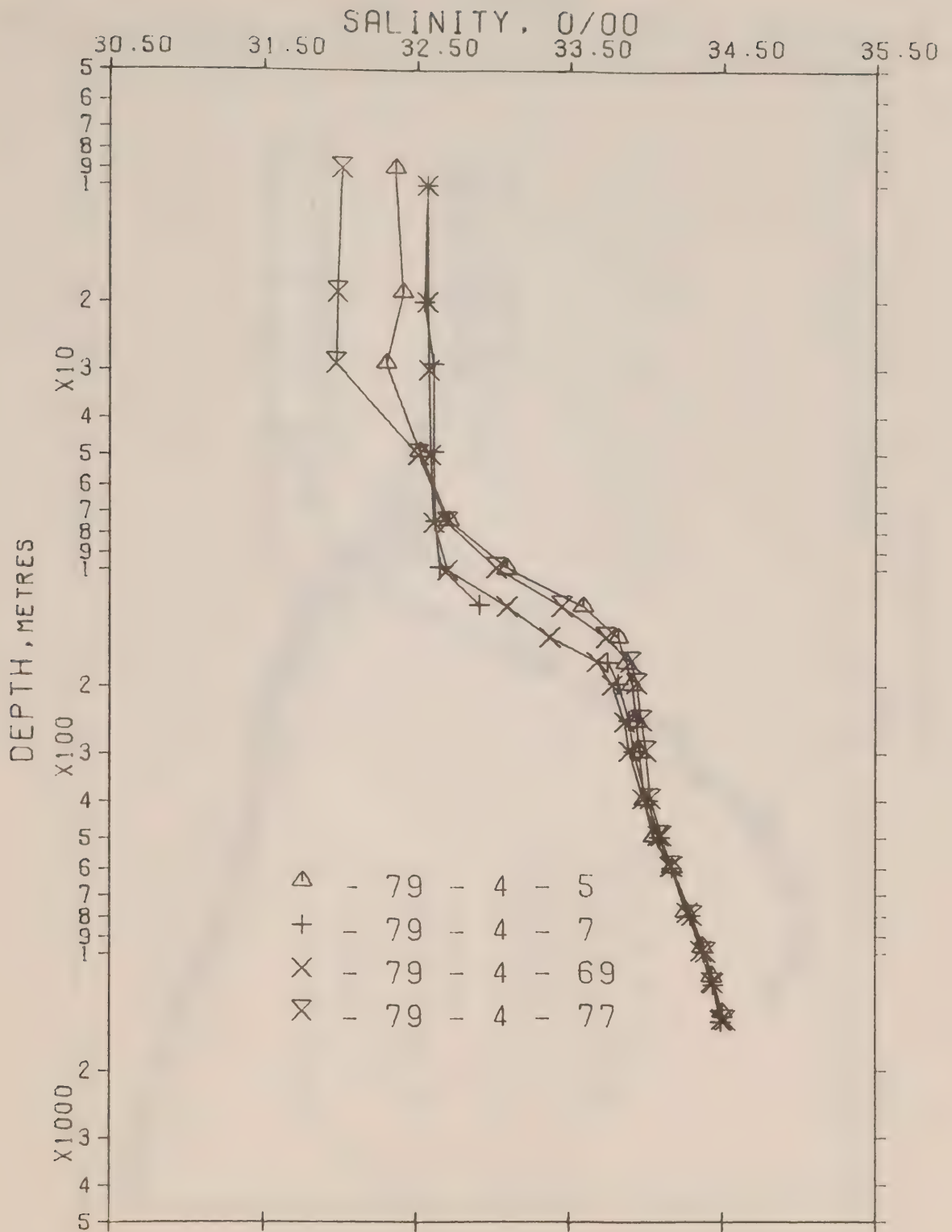


Figure 3. Composite plot of salinity vs \log_{10} depth for Line P Stations.

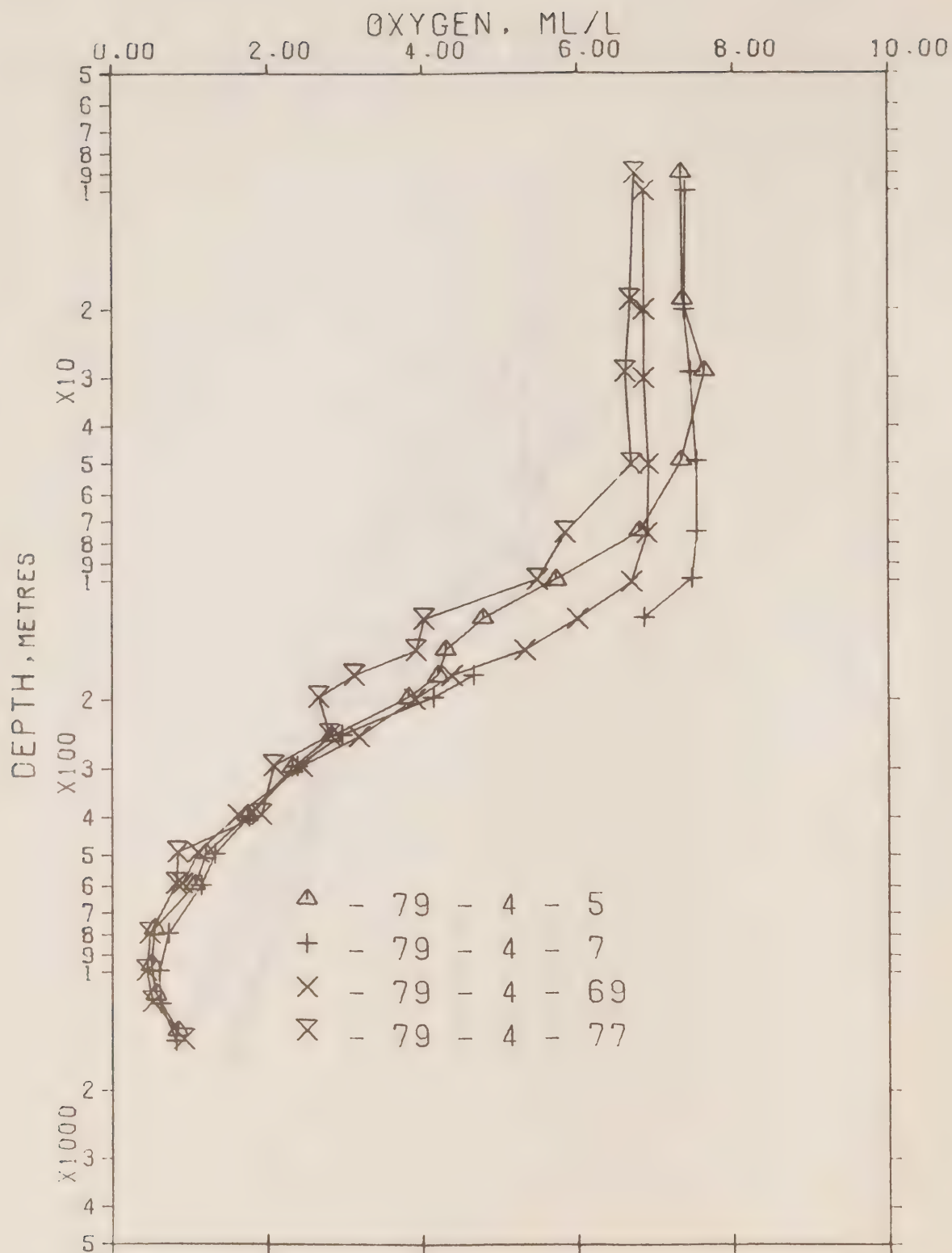


Figure 4. Composite plot of oxygen vs \log_{10} depth for Line P Stations.

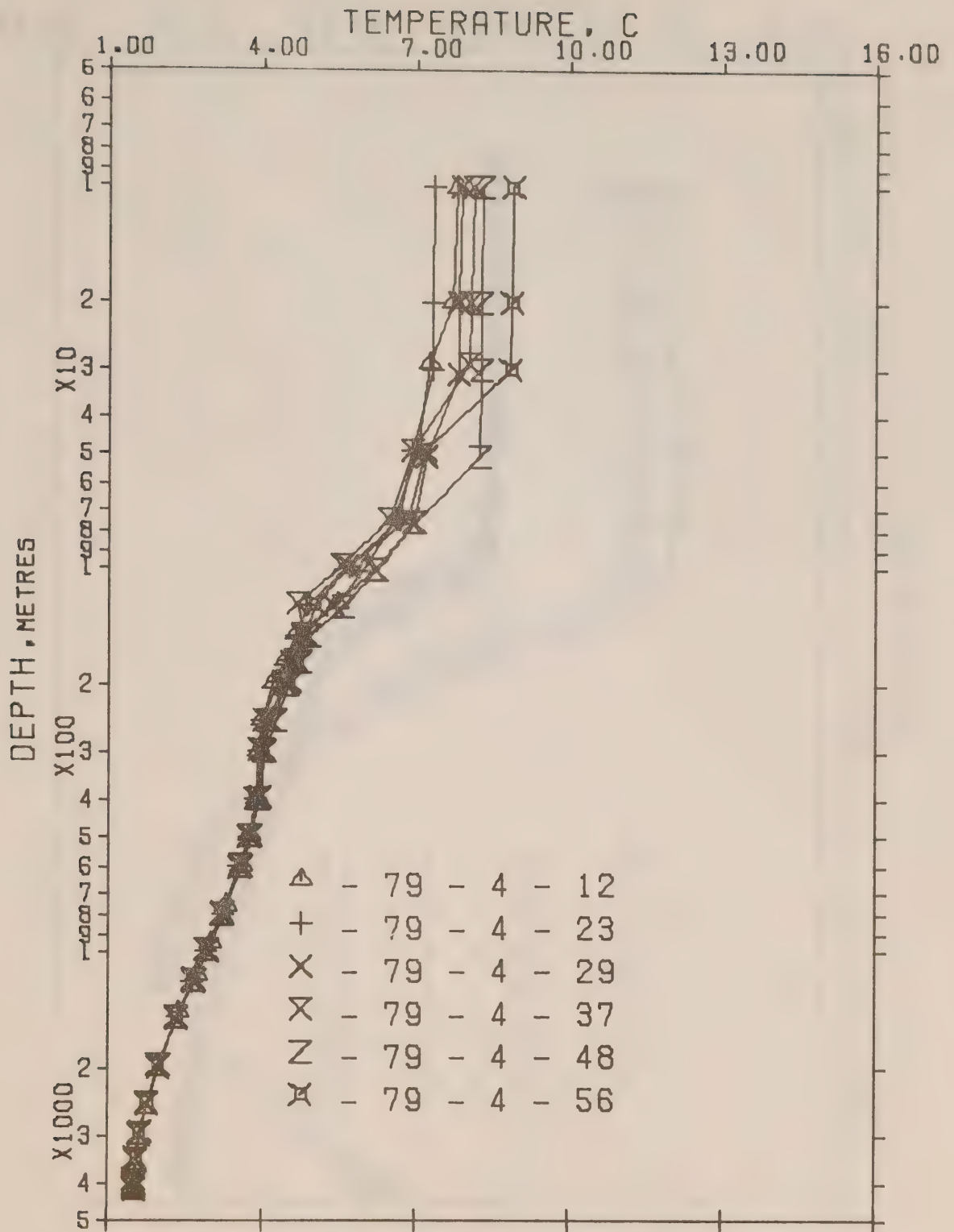


Figure 5. Composite plot of temperature vs \log_{10} depth for Station P.

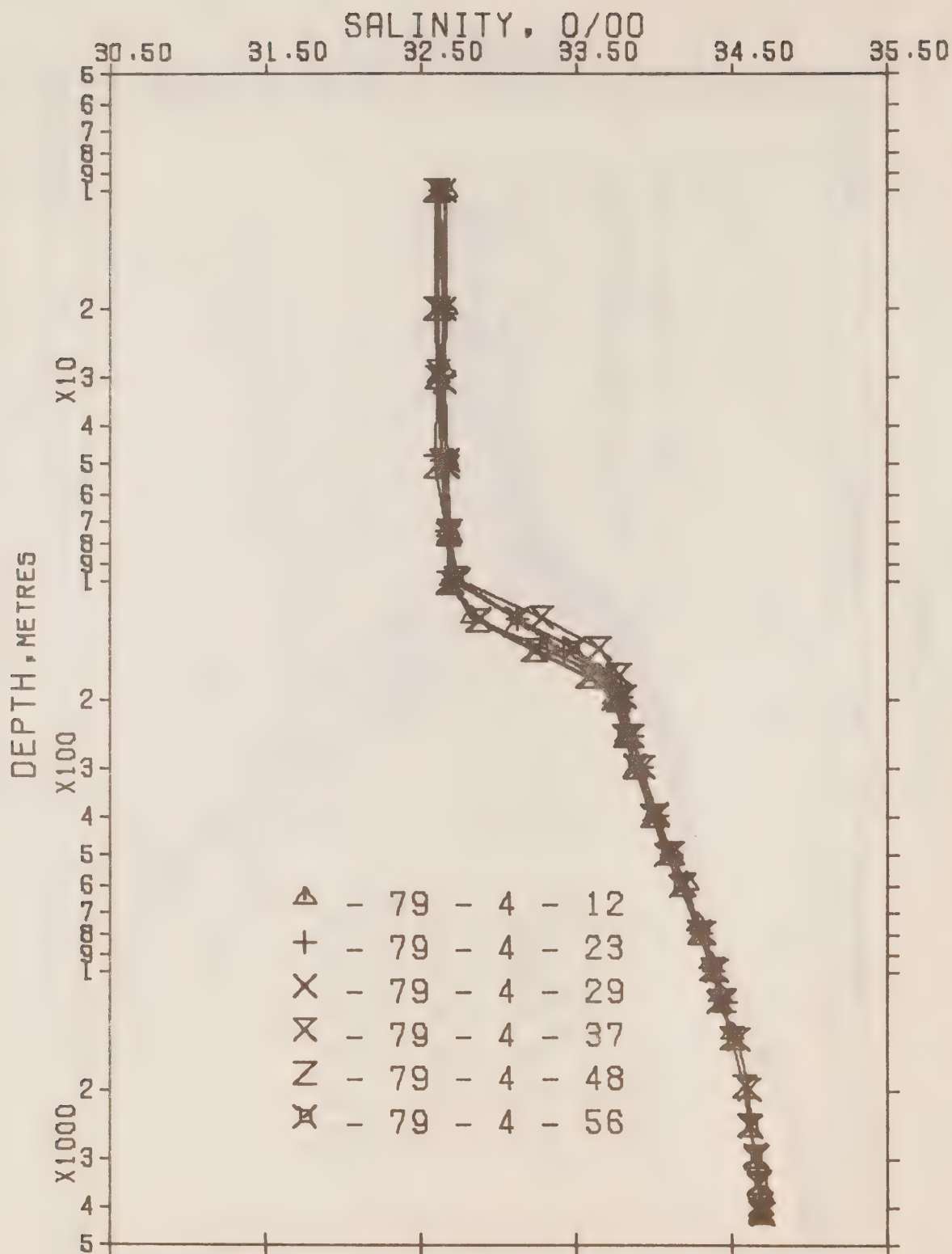


Figure 6. Composite plot of salinity vs \log_{10} depth for Station P.

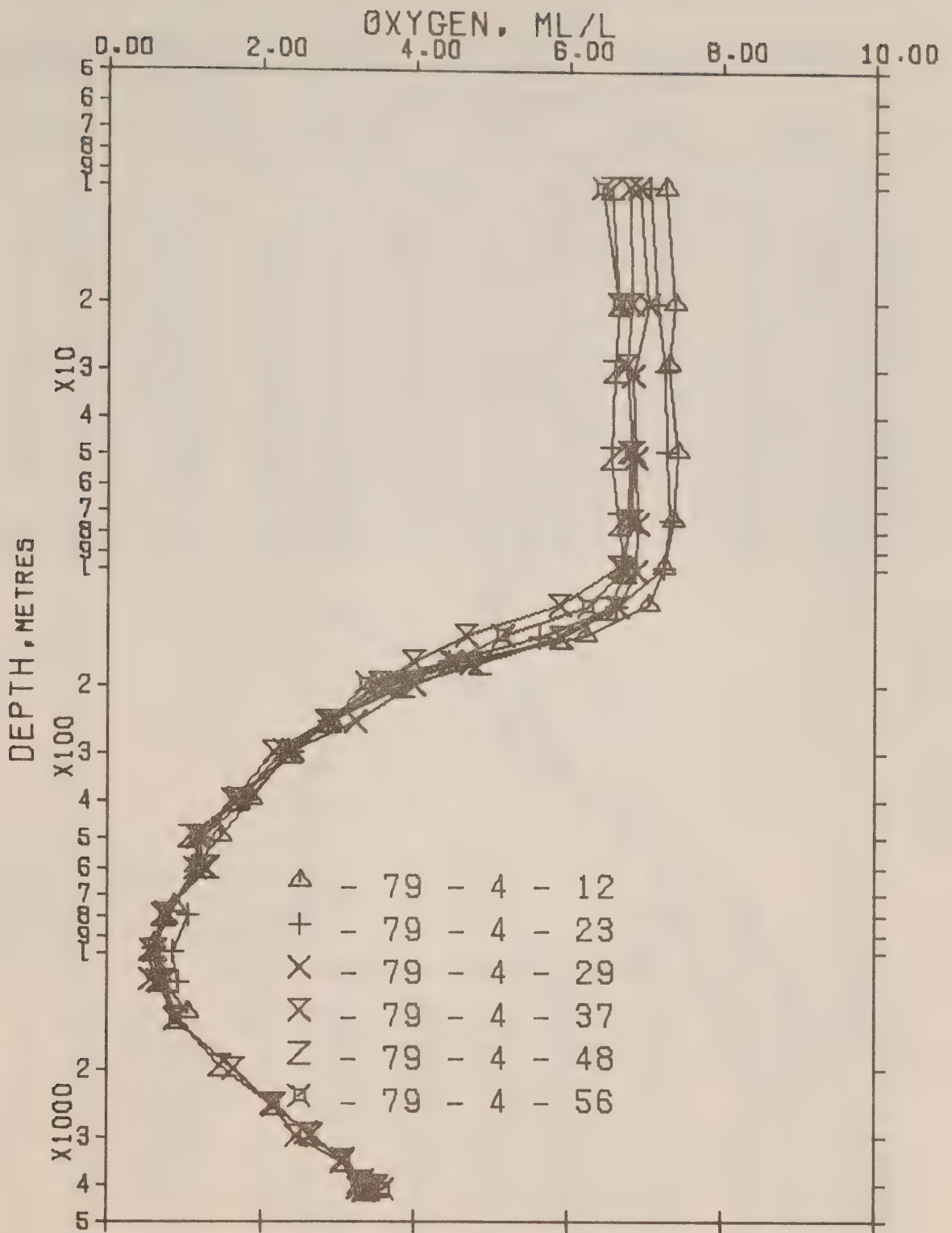
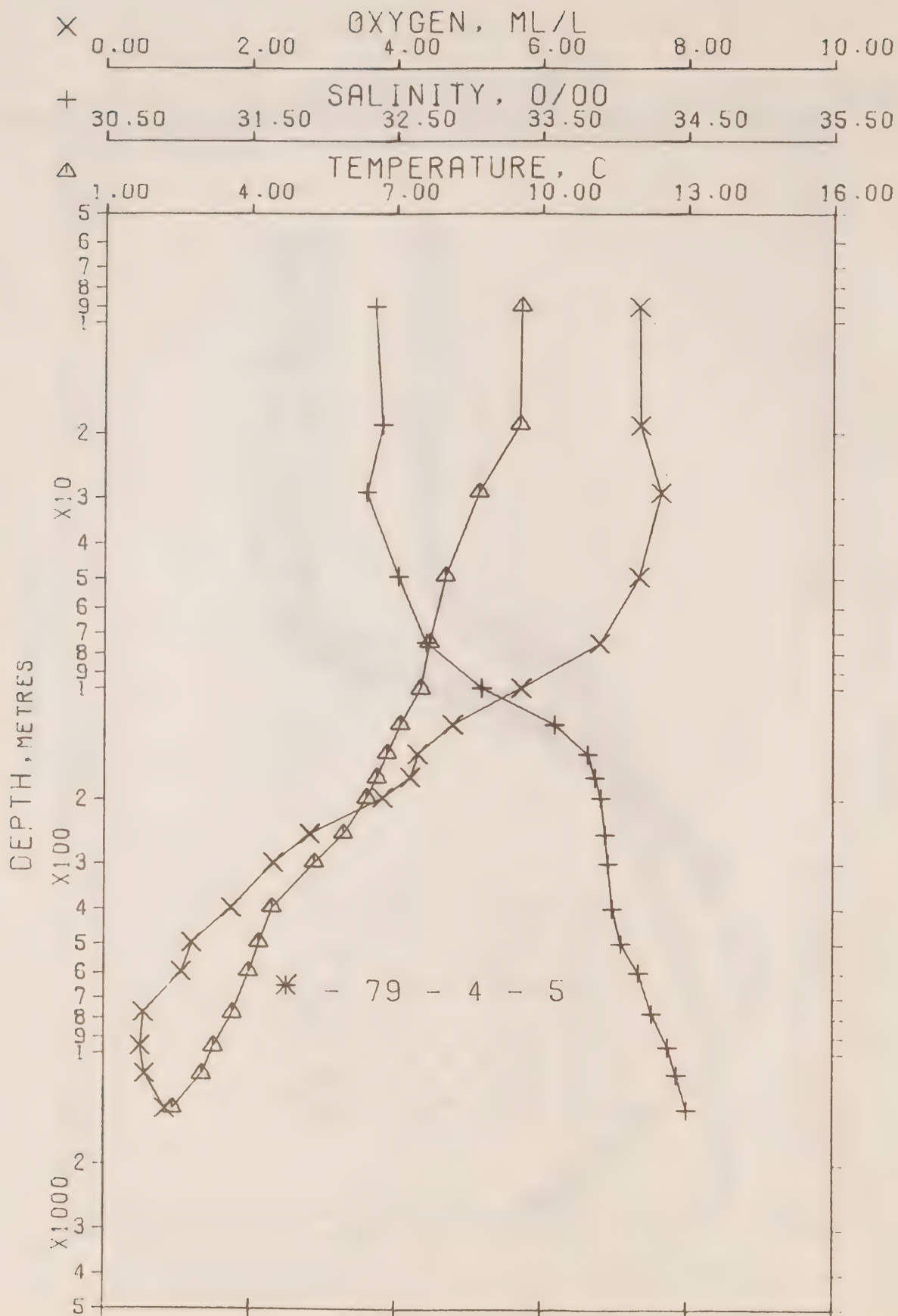


Figure 7. Composite plot of oxygen vs \log_{10} depth for Station P



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 5 DATE 5/ 5/79 GMT 17.2

POSITION 49- 2.0 N, 130-40.0 W STATION 6

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	9.59	32.317	0	24.950	301.4	9.59	301.4	.00	.00	7.40	1485.
9	9.59	32.356	9	24.981	298.7	9.59	298.5	.27	.01	7.34	1486.
19	9.56	32.409	19	25.027	294.5	9.56	294.1	.57	.06	7.36	1486.
29	8.72	32.300	29	25.073	290.2	8.72	289.6	.86	.13	7.65	1483.
49	8.02	32.523	49	25.352	264.0	8.02	263.1	1.42	.35	7.34	1481.
74	7.69	32.707	74	25.543	246.1	7.68	244.9	2.07	.76	6.79	1480.
100	7.51	33.090	99	25.869	215.5	7.50	213.9	2.65	1.27	5.73	1480.
125	7.09	33.594	124	26.322	172.8	7.08	170.8	3.13	1.83	4.77	1480.
150	6.83	33.817	149	26.533	153.1	6.82	150.8	3.54	2.40	4.30	1479.
175	6.62	33.869	174	26.602	146.9	6.60	144.2	3.92	3.02	4.21	1479.
199	6.41	33.905	198	26.658	141.8	6.39	138.9	4.27	3.69	3.82	1479.
250	5.91	33.944	248	26.752	133.3	5.89	129.9	4.96	5.27	2.82	1477.
300	5.33	33.960	298	26.836	125.7	5.31	122.0	5.61	7.10	2.32	1476.
400	4.44	33.986	397	26.957	114.6	4.41	110.5	6.81	11.36	1.74	1474.
499	4.17	34.052	495	27.038	107.5	4.13	102.7	7.91	16.39	1.19	1474.
598	3.97	34.174	593	27.155	97.1	3.93	91.5	8.91	22.01	1.07	1475.
779	3.65	34.263	772	27.258	88.4	3.59	81.7	10.59	33.75	.53	1477.
964	3.26	34.372	955	27.382	77.3	3.19	69.8	12.12	47.31	.50	1479.
1149	3.01	34.435	1138	27.456	71.1	2.93	62.8	13.49	62.12	.56	1481.
1428	2.42	34.502	1413	27.561	61.0	2.32	52.8	15.33	86.17	.85	1483.

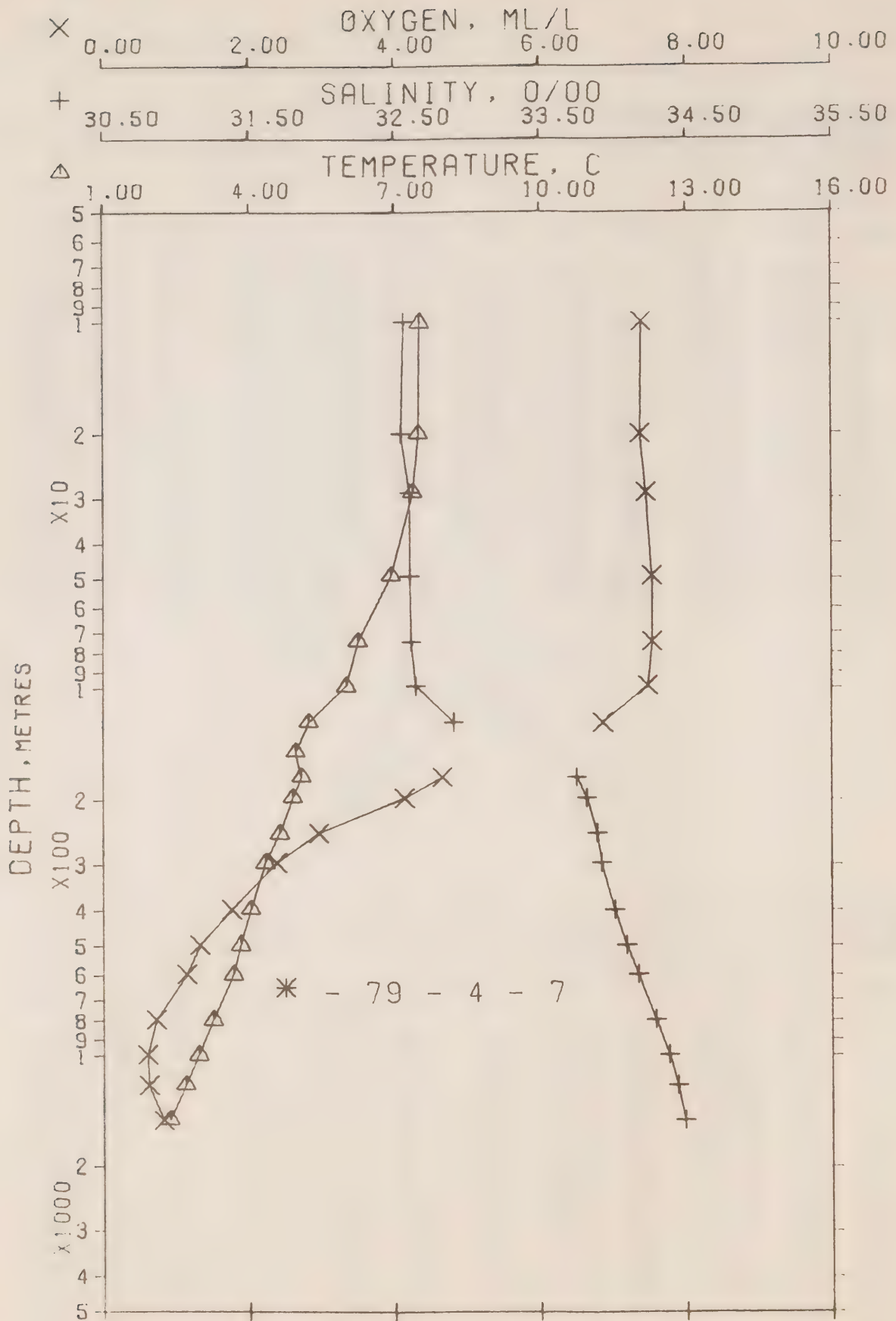
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 5 DATE 5/ 5/79 GMT 17.2

POSITION 49- 2.0 N, 130-40.0 W STATION 6

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	9.59	32.317	0	24.950	301.4	9.59	301.4	.00	.00	7.40	1485.
10	9.59	32.363	10	24.987	298.1	9.58	297.9	.30	.02	7.34	1486.
20	9.47	32.397	20	25.032	294.0	9.47	293.6	.60	.06	7.39	1485.
30	8.68	32.312	30	25.088	288.7	8.68	288.2	.89	.14	7.63	1483.
50	8.01	32.529	50	25.358	263.3	8.00	262.5	1.44	.36	7.32	1481.
75	7.69	32.717	75	25.551	245.3	7.68	244.1	2.08	.77	6.76	1480.
100	7.51	33.090	99	25.869	215.5	7.50	213.9	2.65	1.27	5.73	1480.
125	7.09	33.594	124	26.322	172.8	7.08	170.8	3.13	1.83	4.77	1480.
150	6.83	33.817	149	26.533	153.1	6.82	150.8	3.54	2.40	4.30	1479.
175	6.62	33.869	174	26.602	146.9	6.60	144.2	3.92	3.02	4.21	1479.
200	6.40	33.906	199	26.659	141.7	6.38	138.8	4.28	3.71	3.81	1479.
225	6.14	33.926	223	26.709	137.2	6.12	134.0	4.63	4.46	3.29	1478.
250	5.91	33.944	248	26.752	133.3	5.89	129.9	4.96	5.27	2.82	1477.
300	5.33	33.960	298	26.836	125.7	5.31	122.0	5.61	7.10	2.32	1476.
400	4.44	33.986	397	26.957	114.6	4.41	110.5	6.81	11.36	1.74	1474.
500	4.17	34.053	496	27.039	107.4	4.13	102.6	7.92	16.45	1.19	1474.
600	3.97	34.175	595	27.157	97.0	3.92	91.4	8.93	22.13	1.06	1475.
700	3.78	34.227	694	27.217	91.9	3.73	85.7	9.87	28.38	.75	1476.
800	3.60	34.277	793	27.274	87.0	3.54	80.2	10.77	35.24	.53	1477.
900	3.39	34.337	892	27.343	80.9	3.32	73.6	11.61	42.50	.51	1478.
1000	3.21	34.385	991	27.398	76.0	3.14	68.4	12.39	50.07	.51	1479.
1200	2.89	34.448	1188	27.477	69.1	2.81	60.8	13.85	66.36	.62	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 7

DATE 7/ 5/79

GMT 6.7

POSITION 49-50.0 N, 142-40.0 W

STATION 12

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.53	32.563	0	25.453	253.6	7.53	253.6	.00	.00	7.42	1478.
10	7.53	32.566	10	25.455	253.5	7.53	253.4	.26	.01	7.39	1478.
20	7.52	32.554	20	25.447	254.4	7.52	254.1	.51	.05	7.38	1478.
29	7.40	32.610	29	25.508	248.8	7.40	248.3	.74	.11	7.46	1478.
49	6.94	32.614	49	25.573	242.8	6.94	242.1	1.23	.31	7.55	1476.
74	6.24	32.621	74	25.669	233.9	6.23	232.9	1.83	.69	7.54	1474.
99	6.00	32.648	98	25.720	229.2	5.99	228.0	2.40	1.19	7.48	1474.
124	5.23	32.913	123	26.021	200.8	5.22	199.5	2.94	1.80	6.87	1471.
149	4.95	33.369*	148	26.412	163.9	4.94	162.3	3.40	2.43	5.67*	1471.
174	5.07	33.754	173	26.703	136.7	5.06	134.7	3.78	3.06	4.67	1472.
198	4.89	33.825	197	26.780	129.6	4.87	127.4	4.10	3.66	4.14	1472.
249	4.64	33.886	247	26.856	122.8	4.62	120.1	4.73	5.11	2.95	1472.
299	4.32	33.919	297	26.917	117.3	4.30	114.4	5.34	6.80	2.39	1472.
400	4.03	34.011	397	27.020	108.2	4.00	104.5	6.47	10.85	1.75	1472.
501	3.81	34.092	497	27.106	100.7	3.77	96.2	7.53	15.68	1.31	1473.
602	3.68	34.166	597	27.178	94.6	3.64	89.4	8.51	21.22	1.13	1474.
800	3.26	34.290	793	27.317	82.3	3.20	76.1	10.26	33.66	.73	1476.
1003	2.95	34.376	993	27.414	73.8	2.88	66.8	11.83	48.12	.61	1478.
1206	2.69	34.436	1194	27.485	67.7	2.61	60.0	13.27	64.29	.62	1480.
1512	2.36	34.494	1495	27.560	61.3	2.26	52.8	15.23	91.45	.83	1484.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 7

DATE 7/ 5/79

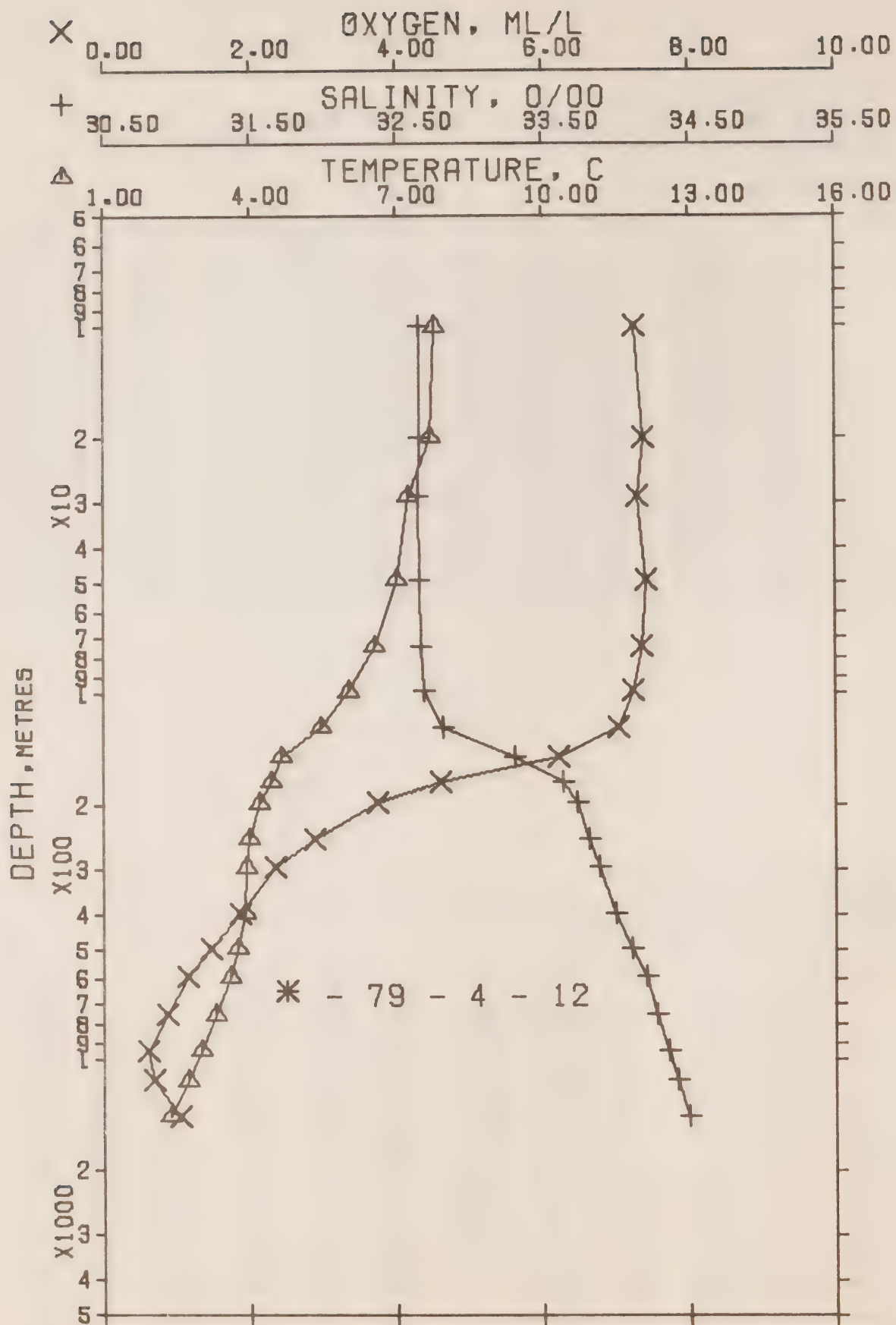
GMT 6.7

POSITION 49-50.0 N, 142-40.0 W

STATION 12

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.53	32.563	0	25.453	253.6	7.53	253.6	.00	.00	7.42	1478.
10	7.53	32.566	10	25.455	253.5	7.53	253.4	.26	.01	7.39	1478.
20	7.52	32.554	20	25.447	254.4	7.52	254.1	.51	.05	7.38	1478.
30	7.38	32.610	30	25.511	248.5	7.37	248.0	.76	.12	7.47	1478.
50	6.92	32.614	50	25.577	242.5	6.91	241.7	1.25	.32	7.55	1476.
75	6.23	32.622	75	25.671	233.7	6.23	232.8	1.85	.69	7.54	1474.
100	5.95	32.664	99	25.739	227.5	5.94	226.3	2.43	1.22	7.44	1473.
125	5.22	32.937	124	26.041	198.9	5.21	197.6	2.96	1.83	6.80	1471.
150	4.96	33.386	149	26.425	162.7	4.94	161.1	3.42	2.46	5.63	1471.
175	5.06	33.757	174	26.706	136.4	5.05	134.4	3.79	3.08	4.65	1472.
200	4.88	33.827	199	26.783	129.4	4.87	127.1	4.12	3.71	4.10	1472.
225	4.75	33.859	223	26.822	125.8	4.73	123.4	4.44	4.40	3.48	1472.
250	4.63	33.887	248	26.857	122.6	4.61	120.0	4.75	5.15	2.94	1472.
300	4.32	33.920	298	26.917	117.2	4.30	114.3	5.35	6.83	2.38	1472.
400	4.03	34.011	397	27.020	108.2	4.00	104.5	6.47	10.85	1.75	1472.
500	3.81	34.091	496	27.106	100.7	3.78	96.3	7.52	15.63	1.32	1473.
600	3.68	34.165	595	27.177	94.7	3.64	89.5	8.49	21.10	1.14	1474.
700	3.46	34.232	694	27.252	88.0	3.41	82.3	9.40	27.14	.92	1475.
800	3.26	34.290	793	27.317	82.3	3.20	76.1	10.26	33.66	.73	1476.
900	3.10	34.335	892	27.368	77.9	3.04	71.3	11.05	40.57	.66	1477.
1000	2.95	34.375	990	27.413	73.9	2.88	66.9	11.81	47.92	.61	1478.
1200	2.70	34.434	1188	27.483	67.9	2.62	60.2	13.23	63.77	.62	1480.
1500	2.37	34.492	1484	27.557	61.5	2.27	53.1	15.16	90.36	.82	1484.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 4- 12
POSITION 50- .0 N, 145- .0 W
HYDROGRAPHIC CAST DATA

DATE 8/ 5/79 GMT 19.4

STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.83	32.661	0	25.487	250.3	7.83	250.3	.00	.00	7.30	1479.
10	7.78	32.663	10	25.496	249.7	7.78	249.5	.25	.01	7.26	1479.
20	7.69	32.658	20	25.505	249.0	7.69	248.6	.50	.05	7.39	1479.
29	7.25	32.652	29	25.561	243.7	7.25	243.2	.73	.11	7.31	1477.
49	6.99	32.661	49	25.604	239.9	6.99	239.2	1.21	.30	7.41	1477.
74	6.55	32.674	74	25.672	233.7	6.54	232.7	1.81	.68	7.35	1475.
99	6.00	32.690	99	25.753	226.1	5.99	224.9	2.37	1.17	7.24	1474.
124	5.45	32.824	123	25.925	210.0	5.44	208.6	2.92	1.80	7.05	1472.
149	4.63	33.311	148	26.402	164.8	4.62	163.3	3.39	2.45	6.21	1470.
174	4.43	33.644	173	26.687	137.0	4.42	136.2	3.77	3.08	4.60	1470.
199	4.17	33.743	198	26.793	128.0	4.16	126.2	4.11	3.71	3.74	1469.
250	3.97	33.825	248	26.878	120.3	3.95	118.0	4.73	5.14	2.88	1469.
299	3.92	33.887	297	26.933	115.5	3.90	112.9	5.31	6.77	2.34	1470.
400	3.88	34.002	397	27.028	107.3	3.85	103.8	6.44	10.77	1.87	1472.
499	3.74	34.105	495	27.124	98.9	3.70	94.6	7.46	15.46	1.47	1473.
597	3.57	34.214	592	27.227	89.8	3.53	84.8	8.38	20.62	1.14	1474.
757	3.27	34.281	750	27.309	82.7	3.22	76.9	9.76	30.09	.86	1475.
951	2.98	34.364	942	27.402	74.7	2.91	68.0	11.28	43.36	.61	1477.
1147	2.72	34.422	1135	27.471	68.8	2.64	61.4	12.68	58.32	.68	1479.
1440	2.36	34.498	1424	27.563	60.7	2.26	52.6	14.58	83.19	1.04	1483.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 12

DATE 8/ 5/79

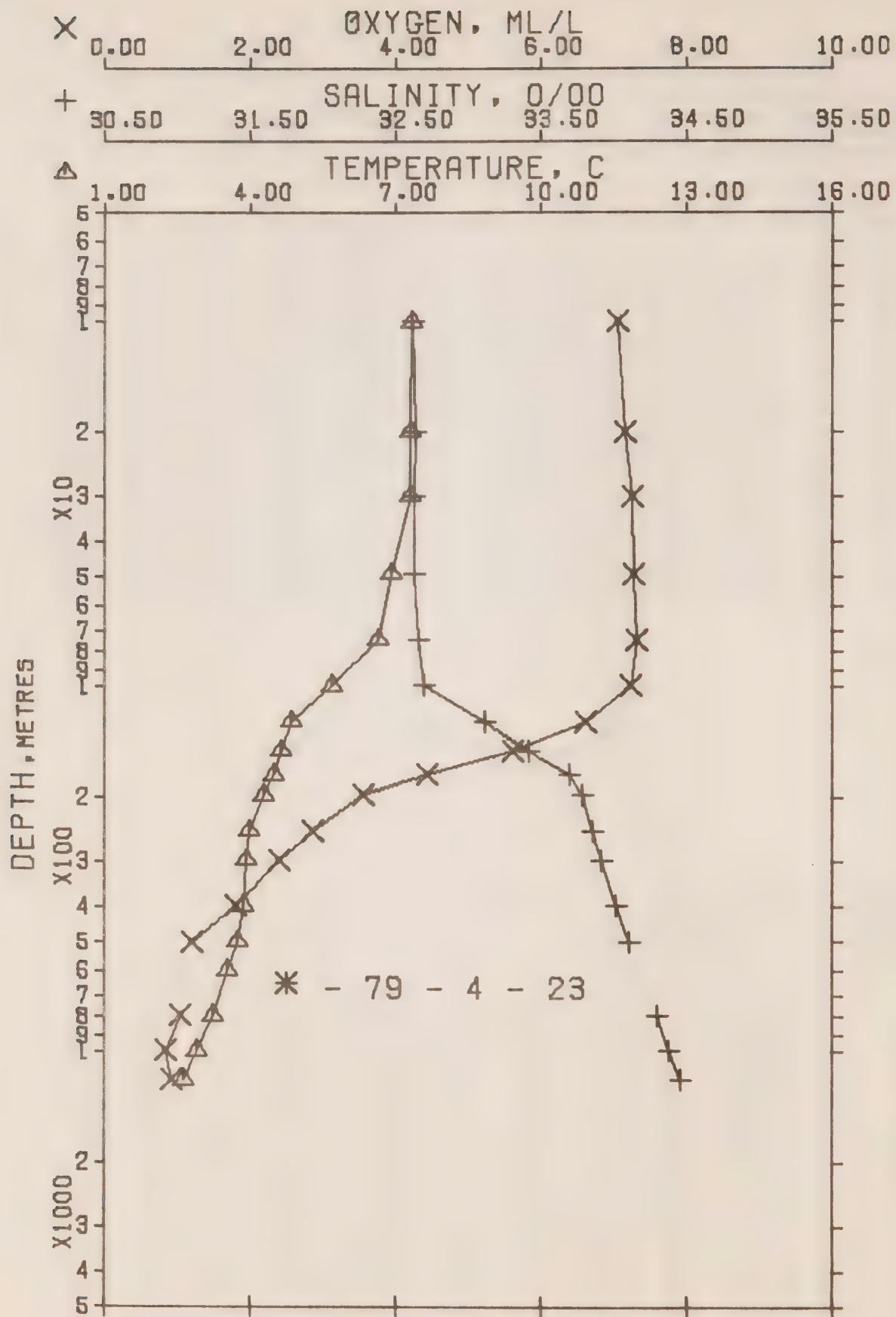
GMT 19.4

POSITION 50- .0 N, 145- .0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.83	32.661	0	25.487	250.3	7.83	250.3	.00	.00	7.30	1479.
10	7.78	32.663	10	25.496	249.7	7.78	249.5	.25	.01	7.26	1479.
20	7.69	32.658	20	25.505	249.0	7.69	248.6	.50	.05	7.39	1479.
30	7.24	32.652	30	25.564	243.5	7.23	243.0	.75	.11	7.31	1477.
50	6.98	32.661	50	25.606	239.7	6.97	239.0	1.23	.31	7.41	1477.
75	6.54	32.674	75	25.674	233.5	6.53	232.5	1.82	.69	7.35	1475.
100	5.97	32.698	99	25.764	225.1	5.96	223.9	2.40	1.20	7.23	1474.
125	5.41	32.849	124	25.950	207.6	5.40	206.2	2.95	1.83	7.00	1472.
150	4.62	33.326	149	26.414	163.6	4.61	162.1	3.41	2.48	6.14	1470.
175	4.42	33.647	174	26.691	137.6	4.41	135.9	3.78	3.10	4.57	1470.
200	4.17	33.744	199	26.794	127.9	4.15	126.1	4.11	3.73	3.72	1469.
225	4.06	33.787	223	26.839	123.9	4.05	121.8	4.43	4.41	3.28	1469.
250	3.97	33.825	248	26.878	120.3	3.95	118.0	4.73	5.14	2.88	1469.
300	3.92	33.888	298	26.933	115.4	3.90	112.8	5.32	6.80	2.34	1470.
400	3.88	34.002	397	27.028	107.3	3.85	103.8	6.44	10.77	1.87	1472.
500	3.74	34.106	496	27.125	98.8	3.70	94.5	7.47	15.51	1.46	1473.
600	3.56	34.215	595	27.229	89.6	3.52	84.6	8.41	20.78	1.13	1474.
700	3.37	34.259	694	27.282	85.0	3.32	79.5	9.28	26.56	.95	1475.
800	3.20	34.301	793	27.332	80.8	3.14	74.7	10.11	32.90	.80	1476.
900	3.05	34.344	892	27.380	76.7	2.99	70.2	10.90	39.71	.67	1477.
1000	2.91	34.360	990	27.421	73.1	2.84	66.2	11.65	46.95	.63	1478.
1200	2.65	34.437	1188	27.490	67.1	2.57	59.6	13.05	62.67	.75	1480.



OFFSHORE OCEANOGRAPHY GROUP
 REFERENCE NO. 79- 4- 23
 POSITION 50- .0 N, 145-
 HYDROGRAPHIC CAST DATA

DATE 15/ 5/79 GMT 19.4
 .0 W

STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.36	32.632	0	25.530	246.2	7.36	246.2	.00	.00	7.16	1477.
10	7.32	32.624	10	25.530	246.4	7.32	246.3	.25	.01	7.07	1477.
20	7.29	32.645	20	25.550	244.6	7.29	244.3	.49	.05	7.15	1477.
30	7.29	32.633	30	25.541	245.6	7.29	245.2	.74	.11	7.26	1478.
49	6.92	32.633	49	25.591	241.1	6.92	240.4	1.21	.30	7.28	1476.
74	6.64	32.658	74	25.647	236.0	6.63	235.0	1.81	.68	7.32	1476.
100	5.68	32.701	99	25.801	221.6	5.67	220.4	2.39	1.19	7.23	1472.
125	4.84	33.122	124	26.229	180.9	4.83	179.7	2.89	1.77	6.62	1470.
150	4.63	33.421	149	26.489	156.5	4.62	155.0	3.32	2.36	5.61	1470.
175	4.48	33.700	174	26.726	134.3	4.47	132.5	3.68	2.97	4.43	1470.
199	4.28	33.788	198	26.817	125.8	4.27	123.9	4.00	3.57	3.55	1470.
250	3.97	33.858	248	26.905	117.8	3.95	115.6	4.61	4.97	2.87	1469.
300	3.90	33.918	298	26.959	113.0	3.88	110.3	5.19	6.60	2.41	1470.
401	3.85	34.017	398	27.043	105.9	3.82	102.3	6.29	10.54	1.81	1471.
502	3.72	34.110	498	27.130	98.4	3.68	94.0	7.33	15.29	1.19	1473.
603	3.53	34.186*	598	27.209	91.5	3.49	86.5	8.28	20.69	1.13*	1474.
802	3.21	34.305	795	27.334	80.6	3.15	74.5	9.99	32.89	1.04	1476.
1002	2.88	34.384	992	27.427	72.5	2.81	65.6	11.51	46.87	.83	1478.
1201	2.61	34.462	1189	27.513	64.9	2.53	57.4	12.89	62.26	.93	1480.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 23

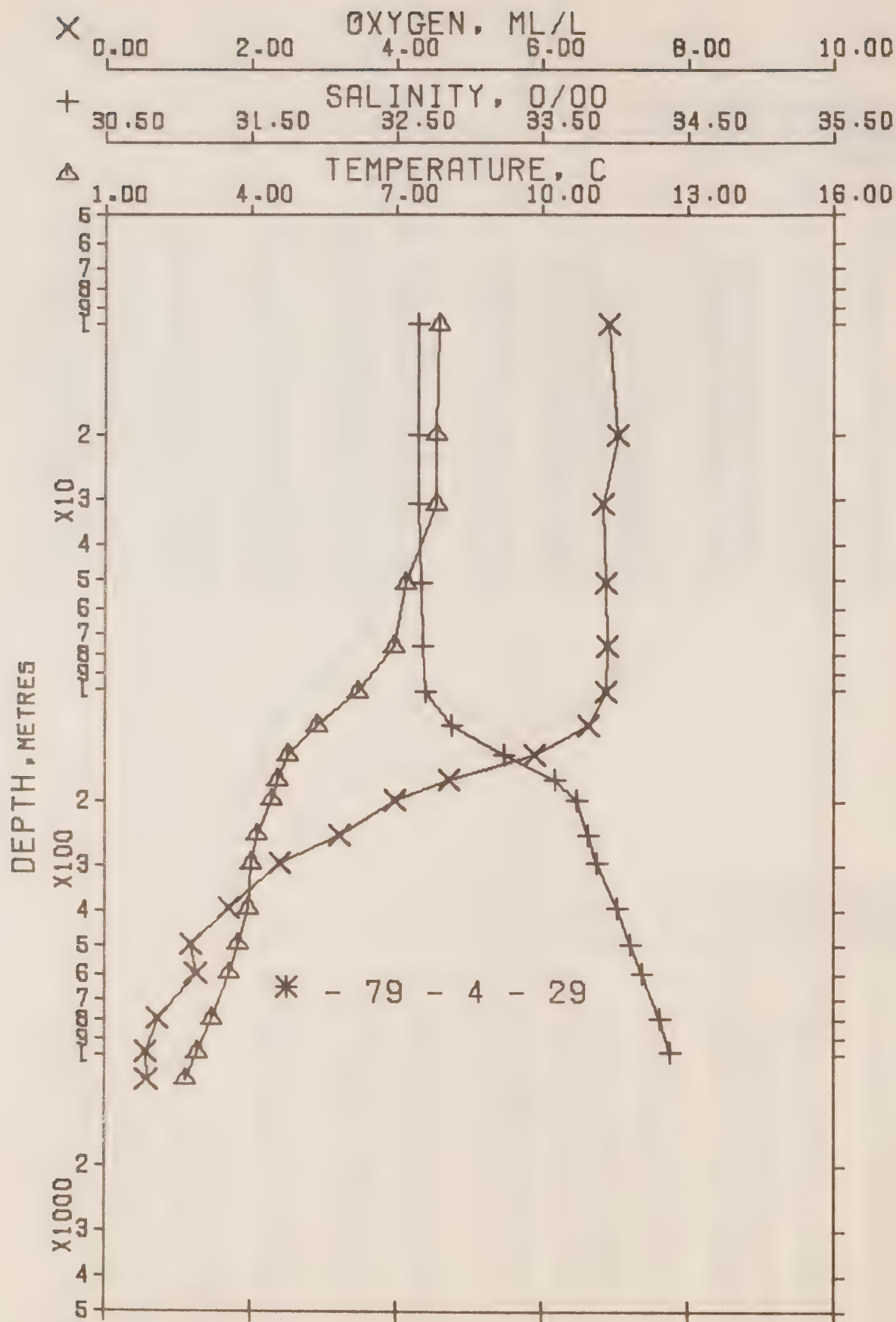
DATE 15/ 5/79 GMT 19.4

POSITION 50- .0 N, 145- .0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.36	32.632	0	25.530	246.2	7.36	246.2	.00	.00	7.16	1477.
10	7.32	32.624	10	25.530	246.4	7.32	246.3	.25	.01	7.07	1477.
20	7.29	32.645	20	25.550	244.6	7.29	244.3	.49	.05	7.15	1477.
30	7.29	32.633	30	25.541	245.6	7.29	245.2	.74	.11	7.26	1478.
50	6.91	32.634	50	25.593	240.9	6.91	240.2	1.22	.31	7.29	1476.
75	6.62	32.659	75	25.651	235.7	6.61	234.6	1.82	.69	7.32	1476.
100	5.68	32.701	99	25.801	221.6	5.67	220.4	2.39	1.19	7.23	1472.
125	4.84	33.122	124	26.229	180.9	4.83	179.7	2.89	1.77	6.62	1470.
150	4.63	33.421	149	26.489	156.5	4.62	155.0	3.32	2.36	5.61	1470.
175	4.48	33.700	174	26.726	134.3	4.47	132.5	3.68	2.97	4.43	1470.
200	4.28	33.789	199	26.818	125.7	4.26	123.8	4.00	3.58	3.54	1470.
225	4.11	33.826	223	26.864	121.5	4.10	119.4	4.31	4.25	3.18	1469.
250	3.97	33.858	248	26.905	117.8	3.95	115.6	4.61	4.97	2.87	1469.
300	3.90	33.918	298	26.959	113.0	3.88	110.3	5.19	6.60	2.41	1470.
400	3.85	34.016	397	27.042	106.0	3.82	102.4	6.28	10.49	1.81	1471.
500	3.72	34.108	496	27.128	98.5	3.69	94.2	7.30	15.18	1.20	1473.
600	3.54	34.184	595	27.207	91.7	3.49	86.7	8.26	20.51	1.14	1474.
700	3.36	34.248	694	27.274	85.8	3.31	80.2	9.14	26.38	1.09	1475.
800	3.21	34.304	793	27.333	80.7	3.16	74.7	9.97	32.74	1.04	1476.
900	3.04	34.346	892	27.382	76.4	2.98	69.9	10.76	39.54	.93	1477.
1000	2.88	34.383	990	27.426	72.5	2.81	65.7	11.50	46.75	.83	1478.
1200	2.61	34.462	1188	27.512	65.0	2.53	57.5	12.88	62.16	.93	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 29

DATE 22/ 5/79

GMT 19.3

POSITION 50- .0 N, 145-

.0 W

STATION P

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.93	32.650	0	25.464	252.5	7.93	252.5	.00	.00	6.86	1480.
10	7.88	32.649	10	25.470	252.1	7.88	251.9	.25	.01	6.92	1480.
20	7.82	32.651	20	25.481	251.2	7.82	250.9	.51	.05	7.04	1479.
31	7.82	32.649	31	25.479	251.6	7.82	251.0	.79	.12	6.84	1480.
51	7.17	32.672	51	25.588	241.4	7.17	240.7	1.28	.33	6.88	1477.
76	6.94	32.675	76	25.621	238.6	6.93	237.5	1.89	.73	6.90	1477.
102	6.20	32.700	101	25.737	227.8	6.19	226.5	2.47	1.26	6.87	1474.
126	5.35	32.876	125	25.978	205.0	5.34	203.6	3.00	1.87	6.64	1472.
151	4.75	33.243	150	26.335	171.2	4.74	169.6	3.47	2.53	5.91	1470.
176	4.54	33.586	175	26.629	143.5	4.53	141.7	3.87	3.19	4.72	1470.
200	4.43	33.744	199	26.766	130.7	4.42	128.7	4.19	3.82	3.97	1470.
250	4.12	33.819	248	26.858	122.3	4.10	119.9	4.82	5.25	3.22	1470.
299	4.00	33.883	297	26.921	116.6	3.98	113.9	5.41	6.90	2.41	1470.
398	3.93	34.017	395	27.035	106.7	3.90	103.1	6.51	10.81	1.70	1472.
498	3.72	34.109	494	27.129	98.4	3.68	94.1	7.53	15.49	1.18	1473.
598	3.55	34.189	593	27.209	91.4	3.51	86.5	8.48	20.79	1.25	1474.
801	3.18	34.309	794	27.340	80.0	3.12	74.0	10.22	33.13	.72	1476.
990	2.90	34.380	980	27.422	72.9	2.83	66.1	11.65	46.23	.56	1478.
1177	2.65	34.546+	1165	27.576	59.0	2.57	51.4	12.89	59.79	.57	1480.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 29

DATE 22/ 5/79

GMT 19.3

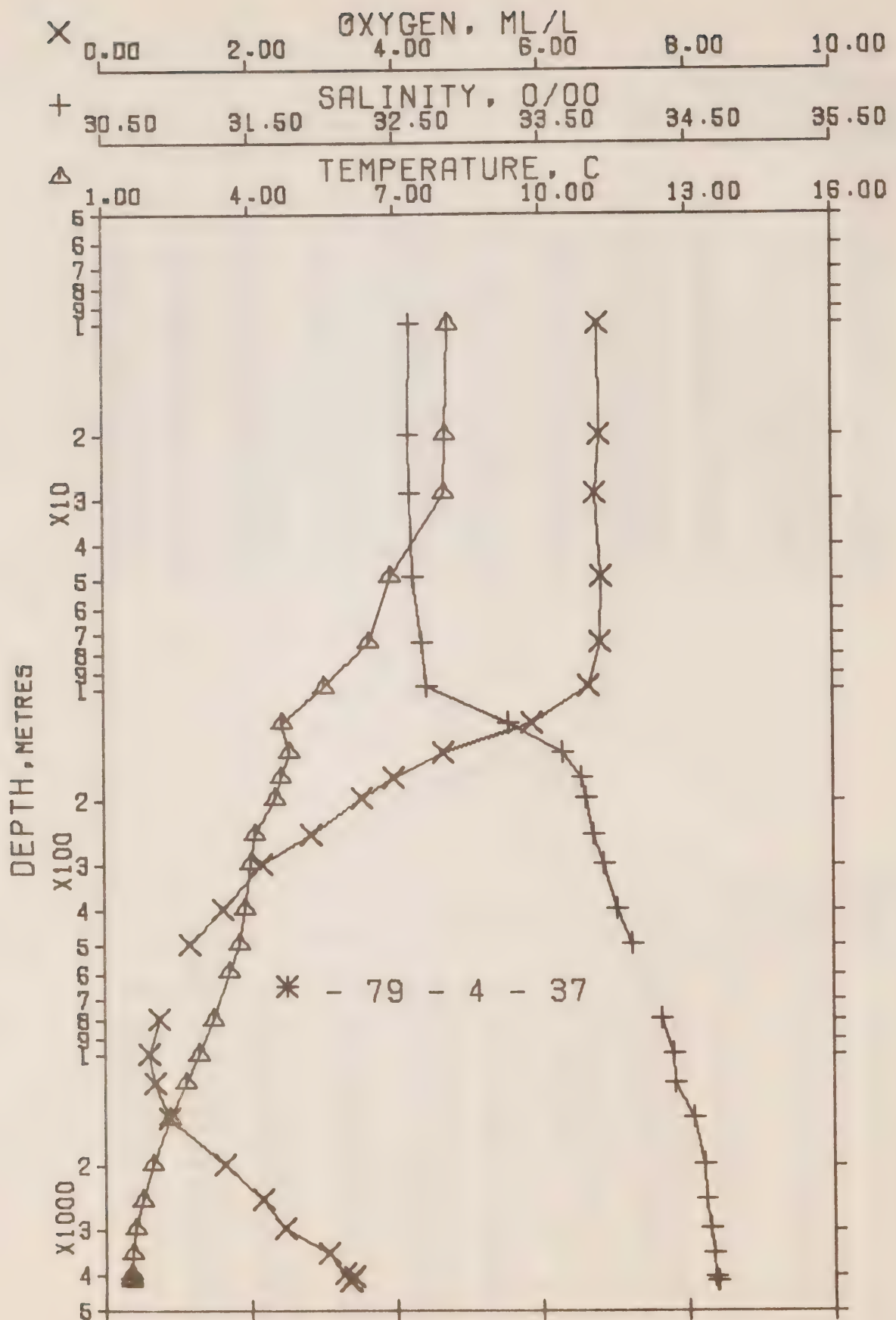
POSITION 50- .0 N, 145-

.0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	7.93	32.650	0	25.464	252.5	7.93	252.5	.00	.00	6.86	1480.
10	7.88	32.649	10	25.470	252.1	7.88	251.9	.25	.01	6.92	1480.
20	7.82	32.651	20	25.481	251.2	7.82	250.9	.51	.05	7.04	1479.
30	7.82	32.649	30	25.479	251.5	7.82	251.0	.76	.12	6.85	1480.
50	7.20	32.671	50	25.582	242.0	7.20	241.2	1.25	.32	6.88	1478.
75	6.95	32.675	75	25.620	238.7	6.94	237.6	1.85	.70	6.90	1477.
100	6.24	32.699	99	25.730	228.4	6.23	227.1	2.44	1.22	6.87	1475.
125	5.38	32.871	124	25.970	205.7	5.37	204.3	2.98	1.84	6.65	1472.
150	4.77	33.230	149	26.322	172.4	4.76	170.9	3.45	2.51	5.94	1470.
175	4.55	33.571	174	26.616	144.7	4.54	142.9	3.85	3.16	4.78	1470.
200	4.43	33.744	199	26.766	130.7	4.42	128.7	4.19	3.82	3.97	1470.
225	4.27	33.783	223	26.815	126.2	4.25	124.1	4.51	4.50	3.58	1470.
250	4.12	33.819	248	26.858	122.3	4.10	119.9	4.82	5.25	3.22	1470.
300	4.00	33.884	298	26.922	116.5	3.98	113.8	5.42	6.93	2.40	1470.
400	3.93	34.019	397	27.037	106.5	3.90	102.9	6.53	10.90	1.69	1472.
500	3.72	34.111	496	27.131	98.3	3.68	94.0	7.55	15.58	1.18	1473.
600	3.55	34.190	595	27.211	91.3	3.50	86.3	8.50	20.89	1.24	1474.
700	3.35	34.254	694	27.280	85.2	3.30	79.7	9.38	26.73	.96	1475.
800	3.18	34.308	793	27.339	80.1	3.13	74.1	10.21	33.04	.72	1476.
900	3.03	34.348	892	27.385	76.1	2.96	69.6	10.99	39.80	.63	1477.
1000	2.88	34.390	990	27.431	72.1	2.82	65.2	11.73	47.00	.56	1478.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 37

DATE 29/ 5/79

GMT 18.9

POSITION 50- .0 N, 145- .0 W

STATION P

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.14	32.605	0	25.398	258.8	8.14	258.8	.00	.00	6.80	1480.
10	8.11	32.605	10	25.403	258.5	8.11	258.3	.26	.01	6.79	1480.
20	8.04	32.602	20	25.411	257.9	8.04	257.6	.52	.05	6.82	1480.
29	8.02	32.613	29	25.422	257.0	8.02	256.5	.75	.11	6.77	1480.
49	6.91	32.630	49	25.590	241.2	6.91	240.5	1.25	.31	6.83	1476.
74	6.46	32.688	74	25.694	231.5	6.45	230.6	1.85	.69	6.82	1475.
99	5.52	32.724	98	25.838	218.0	5.51	216.9	2.39	1.17	6.67	1472.
124	4.66	33.282	123	26.376	167.0	4.65	165.8	2.88	1.71	5.88	1469.
149	4.81	33.647	148	26.648	141.5	4.80	139.9	3.26	2.25	4.67	1471.
174	4.62	33.776	173	26.771	130.1	4.61	128.3	3.60	2.81	3.98	1471.
199	4.50	33.813	198	26.813	126.3	4.49	124.2	3.93	3.43	3.53	1471.
250	4.10	33.864	248	26.896	118.7	4.08	116.4	4.54	4.84	2.84	1470.
300	3.99	33.926	298	26.956	113.3	3.97	110.6	5.13	6.47	2.16	1470.
400	3.88	34.018	397	27.041	106.1	3.85	102.6	6.22	10.38	1.61	1472.
498	3.77	34.119	494	27.132	98.2	3.73	93.8	7.22	14.97	1.16	1473.
593	3.55	34.192*	588	27.212	91.2	3.51	86.2	8.12	19.96	1.01*	1474.
801	3.22	34.318	794	27.343	79.8	3.16	73.7	9.90	32.52	.75	1476.
1000	2.91	34.404	990	27.440	71.3	2.84	64.4	11.39	46.22	.59	1478.
1199	2.64	34.413	1187	27.471	68.8	2.56	61.4	12.79	61.98	.68	1480.
1500	2.33	34.538	1484	27.597	57.7	2.23	49.3	14.67	87.72	.88	1484.
2008	1.96	34.612	1983	27.686	50.1	1.82	40.7	17.41	136.62	1.64	1491.
2518	1.74	34.619	2484	27.709	48.7	1.56	38.3	19.90	194.12	2.17	1498.
3027	1.60	34.652	2983	27.745	46.0	1.38	34.5	22.31	262.37	2.47	1506.
3532	1.53	34.669	3477	27.764	45.1	1.26	32.4	24.61	339.07	3.06	1515.
4030	1.52	34.698+	3962	27.788	44.2	1.19	29.8	26.83	424.71	3.28	1523.
4128	1.52	34.679	4058	27.773	45.8	1.18	31.2	27.27	443.13	3.39	1525.
4216	1.52	34.690	4144	27.782	45.3	1.17	30.3	27.67	460.29	3.35	1526.
4226	1.52	34.701	4153	27.791	44.5	1.17	29.4	27.72	462.07	3.33	1527.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 37

DATE 29/ 5/79

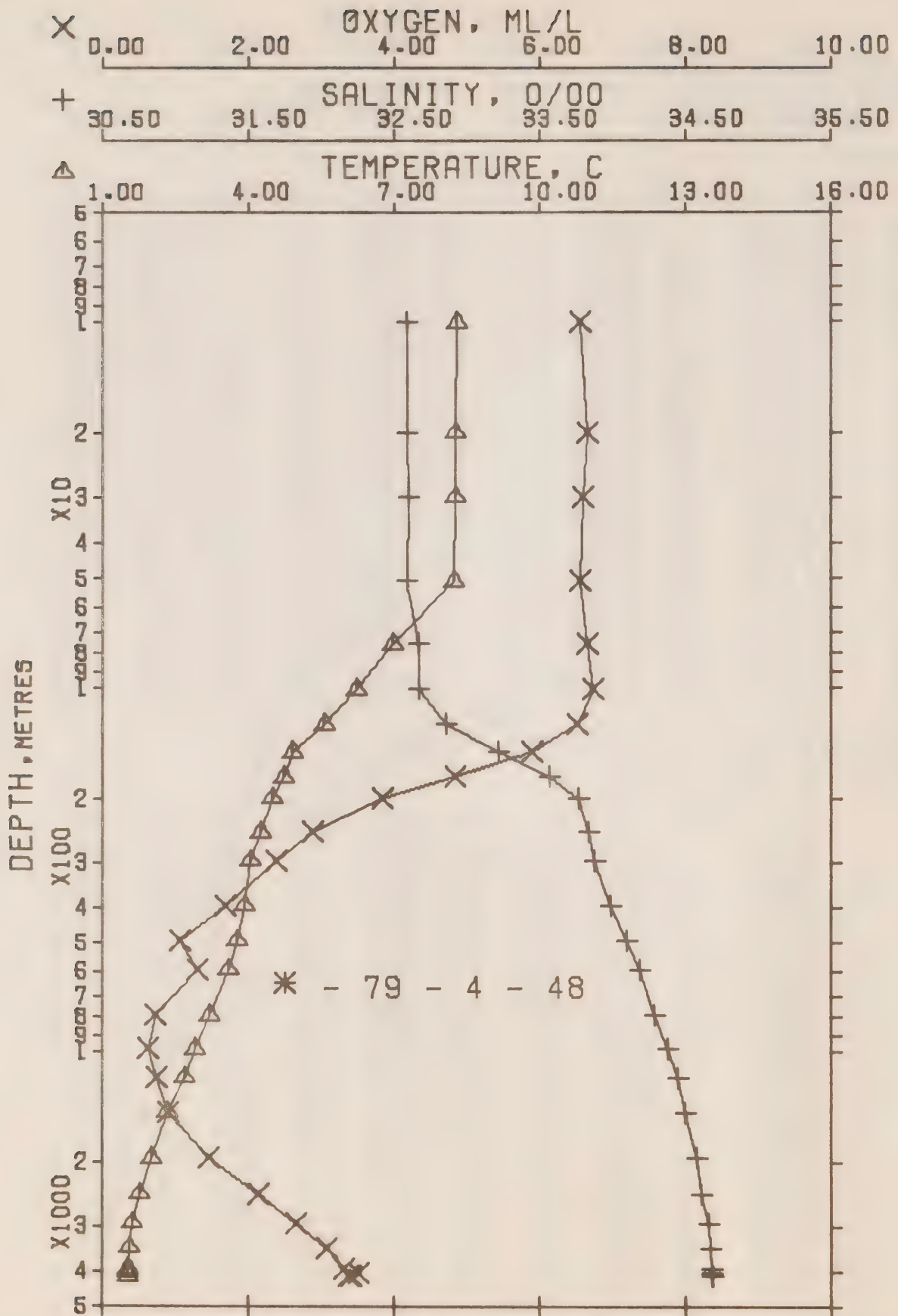
GMT 18.9

POSITION 50- .0 N, 145- .0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.14	32.605	0	25.398	258.8	8.14	258.8	.00	.00	6.80	1480.
10	8.11	32.605	10	25.403	258.5	8.11	258.3	.26	.01	6.79	1480.
20	8.04	32.602	20	25.411	257.9	8.04	257.6	.52	.05	6.82	1480.
30	7.96	32.614	30	25.431	256.1	7.96	255.6	.78	.12	6.77	1480.
50	6.89	32.632	50	25.593	240.9	6.89	240.2	1.27	.32	6.83	1476.
75	6.44	32.689	75	25.698	231.2	6.43	230.2	1.86	.70	6.81	1475.
100	5.47	32.758	99	25.871	214.9	5.46	213.8	2.42	1.20	6.62	1472.
125	4.67	33.301	124	26.390	165.7	4.66	164.5	2.90	1.74	5.82	1469.
150	4.80	33.653	149	26.653	141.0	4.79	139.4	3.28	2.27	4.64	1471.
175	4.62	33.777	174	26.772	129.9	4.60	128.1	3.61	2.83	3.97	1471.
200	4.49	33.814	199	26.814	126.2	4.48	124.1	3.93	3.44	3.52	1471.
225	4.29	33.840	223	26.858	122.2	4.27	120.0	4.25	4.11	3.16	1470.
250	4.10	33.864	248	26.896	118.7	4.08	116.4	4.54	4.84	2.84	1470.
300	3.99	33.926	298	26.956	113.3	3.97	110.6	5.13	6.47	2.16	1470.
400	3.88	34.018	397	27.041	106.1	3.85	102.6	6.22	10.38	1.61	1472.
500	3.77	34.121	496	27.134	98.0	3.73	93.7	7.24	15.06	1.15	1473.
600	3.54	34.197	595	27.217	90.7	3.50	85.8	8.19	20.34	1.00	1474.
700	3.37	34.261	694	27.284	84.8	3.32	79.3	9.06	26.15	.86	1475.
800	3.22	34.317	793	27.342	79.8	3.17	73.7	9.89	32.44	.75	1476.
900	3.06	34.363	892	27.394	75.3	3.00	68.8	10.66	39.15	.67	1477.
1000	2.91	34.404	990	27.440	71.3	2.84	64.4	11.39	46.22	.59	1478.
1200	2.64	34.413	1188	27.472	68.8	2.56	61.3	12.80	62.04	.68	1480.
1500	2.33	34.538	1484	27.597	57.7	2.23	49.3	14.67	87.72	.88	1484.
2000	1.96	34.611	1976	27.685	50.2	1.83	40.8	17.37	135.85	1.63	1491.
2500	1.75	34.619	2467	27.708	48.7	1.57	38.4	19.81	191.91	2.15	1498.
3000	1.61	34.650	2956	27.744	46.1	1.39	34.7	22.19	258.53	2.45	1506.
3500	1.53	34.668	3445	27.763	45.2	1.26	32.6	24.46	333.81	3.02	1514.
4000	1.52	34.696	3933	27.787	44.3	1.20	30.0	26.70	419.34	3.27	1523.
4100	1.52	34.684	4031	27.777	45.4	1.19	30.8	27.14	437.74	3.36	1524.
4200	1.52	34.688	4128	27.780	45.4	1.17	30.5	27.60	457.07	3.36	1526.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4-48

DATE 4/ 6/79 GMT 18.5

POSITION 50- .0 N, 145-

STATION P

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.31	32.592	0	25.363	262.1	8.31	262.1	.00	.00	6.67	1481.
10	8.29	32.593	10	25.367	261.9	8.29	261.8	.26	.01	6.55	1481.
20	8.26	32.595	20	25.373	261.5	8.26	261.2	.53	.05	6.66	1481.
30	8.25	32.597	30	25.376	261.4	8.25	260.9	.79	.12	6.61	1481.
51	8.24	32.595	51	25.376	261.7	8.23	260.8	1.34	.35	6.56	1482.
76	6.96	32.670	76	25.615	239.2	6.95	238.1	1.97	.76	6.66	1477.
102	6.22	32.673	101	25.713	230.1	6.21	228.8	2.56	1.29	6.74	1475.
127	5.56	32.864	126	25.944	208.3	5.55	206.8	3.11	1.94	6.53	1473.
151	4.91	33.218	150	26.298	174.8	4.90	173.2	3.57	2.59	5.89	1471.
176	4.72	33.570	175	26.597	146.6	4.71	144.8	3.98	3.26	4.84	1471.
201	4.49	33.772	200	26.782	129.2	4.48	127.2	4.33	3.93	3.84	1471.
251	4.23	33.837	249	26.861	122.1	4.21	119.7	4.95	5.36	2.88	1470.
300	4.03	33.881	298	26.917	117.1	4.01	114.4	5.54	7.01	2.38	1470.
399	3.91	33.993	396	27.018	108.3	3.88	104.7	6.65	10.98	1.69	1472.
499	3.75	34.097	495	27.116	99.6	3.71	95.3	7.69	15.73	1.07	1473.
600	3.58	34.188	595	27.205	91.8	3.54	86.8	8.65	21.14	1.30	1474.
801	3.19	34.294	794	27.327	81.2	3.13	75.2	10.39	33.49	.72	1476.
993	2.90	34.376	983	27.419	73.2	2.83	66.4	11.86	46.95	.61	1478.
1187	2.68	34.454	1175	27.500	66.2	2.60	58.6	13.21	61.92	.73	1480.
1481	2.33	34.500	1465	27.567	60.4	2.23	52.2	15.07	87.18	.90	1483.
1979	1.98	34.579	1955	27.658	52.7	1.84	43.3	17.88	136.63	1.45	1490.
2484	1.74	34.611	2451	27.702	49.1	1.56	38.9	20.45	195.07	2.13	1498.
2993	1.61	34.656	2950	27.748	45.7	1.39	34.3	22.85	261.98	2.65	1506.
3503	1.53	34.670	3448	27.765	45.0	1.26	32.4	25.16	338.47	3.09	1514.
4009	1.52	34.679	3942	27.773	45.5	1.20	31.3	27.44	425.94	3.31	1523.
4110	1.52	34.675	4040	27.770	46.0	1.18	31.5	27.90	444.98	3.52	1525.
4200	1.51	34.681	4128	27.775	45.7	1.16	30.9	28.32	462.74	3.38	1526.
4209	1.52	34.690	4137	27.782	45.3	1.17	30.3	28.36	464.54	3.41	1526.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4-48

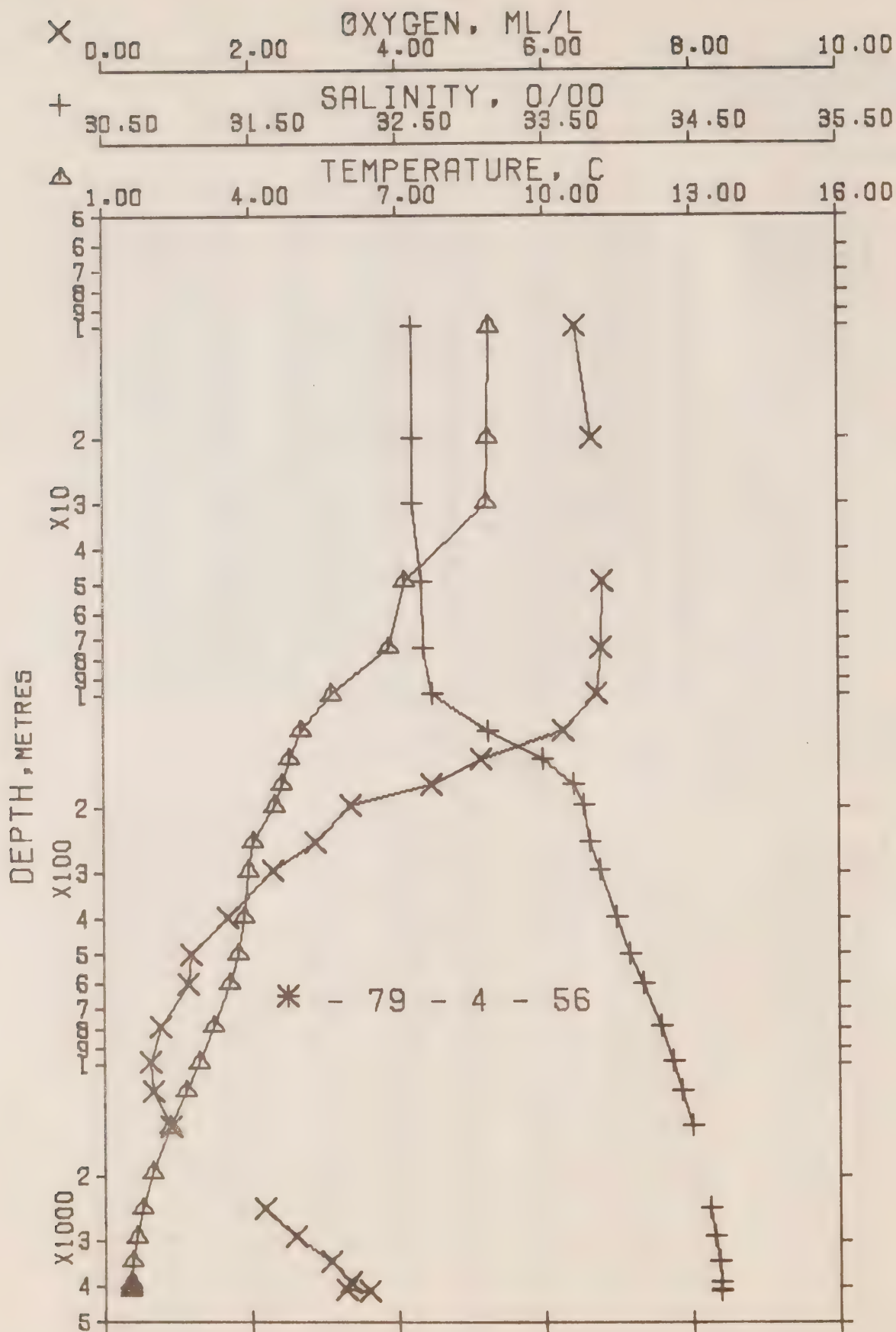
DATE 4/ 6/79 GMT 18.5

POSITION 50- .0 N, 145- .0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.31	32.592	0	25.363	262.1	8.31	262.1	.00	.00	6.67	1481.
10	8.29	32.593	10	25.367	261.9	8.29	261.8	.26	.01	6.55	1481.
20	8.26	32.595	20	25.373	261.5	8.26	261.2	.53	.05	6.66	1481.
30	8.25	32.597	30	25.376	261.4	8.25	260.9	.79	.12	6.61	1481.
50	8.24	32.595	50	25.376	261.7	8.24	260.8	1.31	.33	6.56	1482.
75	7.02	32.666	75	25.603	240.3	7.02	239.2	1.94	.73	6.65	1477.
100	6.26	32.673	99	25.707	230.6	6.25	229.3	2.52	1.26	6.74	1475.
125	5.60	32.852	124	25.929	209.7	5.59	208.2	3.07	1.89	6.54	1473.
150	4.93	33.205	149	26.284	176.0	4.92	174.4	3.56	2.56	5.91	1471.
175	4.73	33.555	174	26.584	147.8	4.72	146.0	3.96	3.23	4.89	1471.
200	4.50	33.762	199	26.772	130.1	4.49	128.1	4.31	3.89	3.89	1471.
225	4.36	33.805	223	26.822	125.6	4.34	123.4	4.63	4.58	3.36	1470.
250	4.23	33.836	248	26.860	122.2	4.22	119.8	4.94	5.33	2.89	1470.
300	4.03	33.881	298	26.917	117.1	4.01	114.4	5.54	7.01	2.38	1470.
400	3.91	33.994	397	27.019	108.2	3.88	104.6	6.66	11.02	1.68	1472.
500	3.75	34.098	496	27.117	99.6	3.71	95.2	7.70	15.78	1.07	1473.
600	3.58	34.188	595	27.205	91.8	3.54	86.8	8.65	21.14	1.30	1474.
700	3.37	34.244	694	27.270	86.1	3.32	80.6	9.54	27.02	.99	1475.
800	3.19	34.293	793	27.326	81.3	3.14	75.3	10.38	33.41	.73	1476.
900	3.03	34.339	892	27.377	76.9	2.97	70.4	11.17	40.26	.66	1477.
1000	2.89	34.379	990	27.422	72.9	2.82	66.1	11.92	47.51	.62	1478.
1200	2.66	34.456	1188	27.504	65.9	2.58	58.3	13.29	62.96	.74	1480.
1500	2.31	34.503	1484	27.571	60.1	2.21	51.8	15.18	88.90	.93	1484.
2000	1.97	34.580	1976	27.660	52.5	1.83	43.1	17.99	138.88	1.48	1491.
2500	1.74	34.613	2467	27.704	49.0	1.56	38.7	20.53	197.06	2.15	1498.
3000	1.61	34.656	2957	27.748	45.7	1.39	34.3	22.88	262.92	2.66	1506.
3500	1.53	34.670	3445	27.765	45.0	1.26	32.4	25.14	338.04	3.08	1514.
4000	1.52	34.679	3933	27.773	45.5	1.20	31.3	27.40	424.26	3.31	1523.
4100	1.52	34.675	4031	27.770	46.0	1.19	31.5	27.86	443.12	3.50	1524.
4200	1.51	34.681	4128	27.775	45.7	1.16	30.9	28.32	462.74	3.38	1526.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 4- 56
POSITION 50- .0 N, 145- .0 W
HYDROGRAPHIC CAST DATA

DATE 11/ 6/79 GMT 19.1

STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.89	32.610	0	25.289	269.1	8.89	269.1	.00	.00	6.59	1483.
10	8.89	32.609	10	25.288	269.4	8.89	269.2	.27	.01	6.43	1483.
20	8.87	32.608	20	25.291	269.3	8.87	269.0	.54	.06	6.66	1483.
30	8.83	32.608	30	25.297	268.9	8.83	268.4	.81	.13	6.73*	1483.
49	7.15	32.666	49	25.586	241.6	7.15	240.9	1.30	.32	6.81	1477.
74	6.82	32.683	74	25.643	236.4	6.81	235.4	1.90	.70	6.78	1477.
100	5.66	32.738	99	25.832	218.6	5.65	217.4	2.48	1.21	6.71	1472.
125	5.01	33.117	124	26.207	183.2	5.00	181.9	2.98	1.79	6.25	1471.
149	4.79	33.487	148	26.524	153.3	4.78	151.7	3.39	2.35	5.13	1471.
174	4.63	33.696	173	26.707	136.2	4.62	134.4	3.75	2.95	4.47	1471.
199	4.49	33.772	198	26.782	129.2	4.48	127.2	4.09	3.59	3.36	1471.
250	4.04	33.810	248	26.859	122.1	4.02	119.8	4.72	5.03	2.88	1469.
299	3.95	33.875	297	26.920	116.7	3.93	114.1	5.31	6.68	2.31	1470.
400	3.85	33.991	397	27.022	107.8	3.82	104.3	6.44	10.71	1.67	1471.
502	3.74	34.084	498	27.107	100.5	3.70	96.2	7.50	15.59	1.18	1473.
604	3.56	34.169	599	27.192	93.1	3.52	88.1	8.49	21.15	1.15	1474.
791	3.23	34.289	784	27.319	82.0	3.18	75.9	10.12	32.73	.75	1476.
991	2.92	34.370	981	27.412	73.9	2.85	67.0	11.67	46.78	.62	1478.
1189	2.66	34.435	1177	27.487	67.4	2.58	59.9	13.07	62.31	.66	1480.
1487	2.33	34.503	1471	27.569	60.2	2.23	52.0	14.96	88.09	.89	1484.
1985	1.97	34.571*	1961	27.652	53.2	1.83	43.9	17.78	138.00	1.61*	1490.
2483	1.75	34.623	2450	27.711	48.4	1.57	38.1	20.30	195.20	2.17	1498.
2982	1.62	34.654	2939	27.746	46.0	1.40	34.5	22.65	260.66	2.59	1506.
3481	1.55	34.684	3427	27.775	44.3	1.28	31.5	24.89	334.38	3.09	1514.
3980	1.51	34.689	3914	27.782	44.6	1.19	30.5	27.07	417.29	3.34	1522.
4080	1.52	34.676+	4011	27.771	45.9	1.19	31.5	27.52	435.84	3.34+	1524.
4170	1.52	34.686	4099	27.779	45.4	1.18	30.6	27.94	453.29	3.28	1526.
4179	1.52	34.693	4108	27.784	45.0	1.18	30.1	27.98	455.07	3.60	1526.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 56

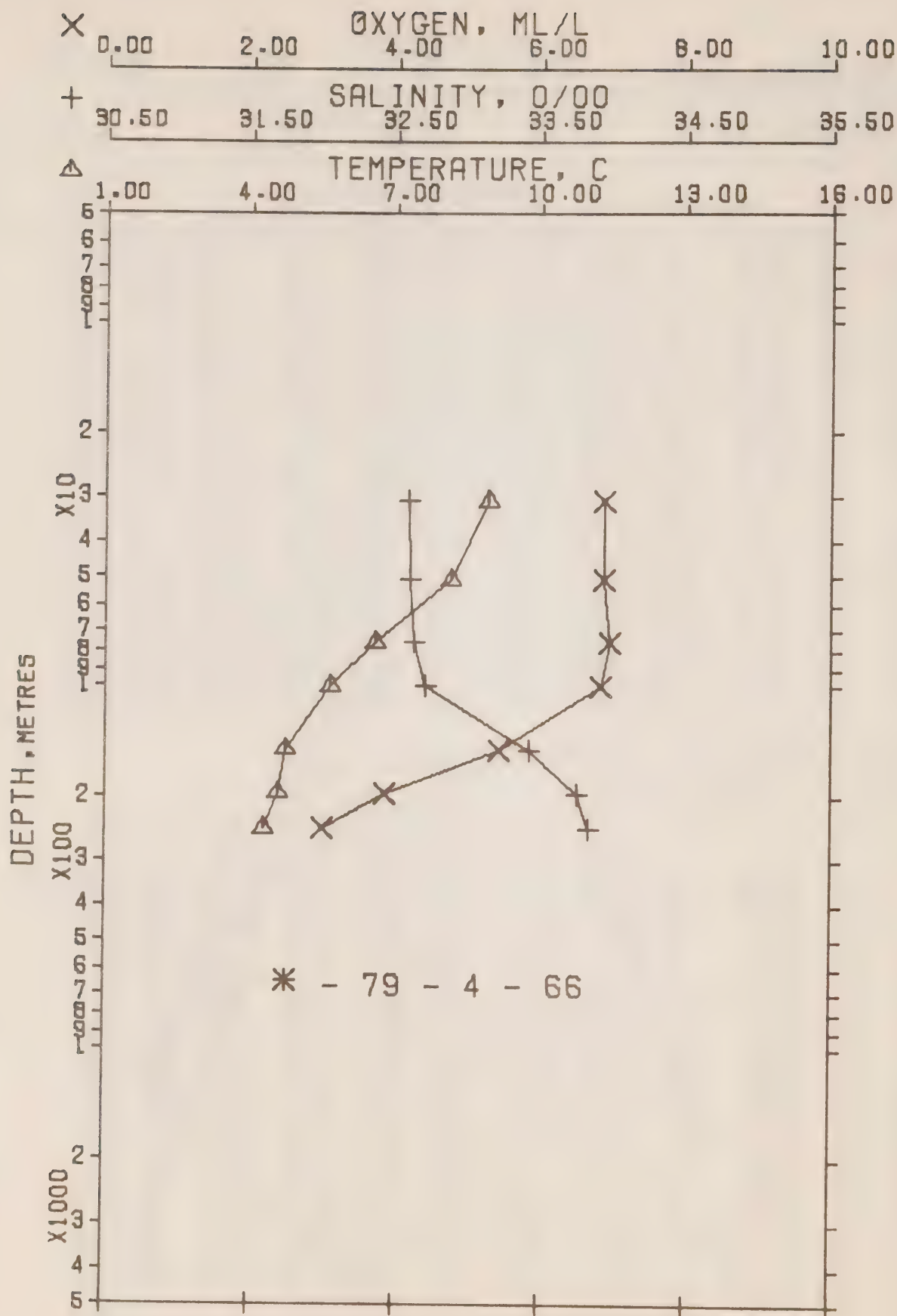
DATE 11/ 6/79 GMT 19.1

POSITION 50- .0 N, 145- .0 W

STATION P

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.89	32.610	0	25.289	269.1	8.89	269.1	.00	.00	6.59	1483.
10	8.89	32.609	10	25.288	269.4	8.89	269.2	.27	.01	6.43	1483.
20	8.87	32.608	20	25.291	269.3	8.87	269.0	.54	.06	6.66	1483.
30	8.83	32.608	30	25.297	268.9	8.83	268.4	.81	.13	6.73	1483.
50	7.14	32.667	50	25.588	241.4	7.13	240.7	1.32	.33	6.81	1477.
75	6.79	32.684	75	25.648	236.0	6.78	234.9	1.92	.71	6.78	1476.
100	5.66	32.738	99	25.832	218.6	5.65	217.4	2.48	1.21	6.71	1472.
125	5.01	33.117	124	26.207	183.2	5.00	181.9	2.98	1.79	6.25	1471.
150	4.78	33.496	149	26.532	152.6	4.77	151.0	3.40	2.38	5.11	1471.
175	4.63	33.699	174	26.709	135.9	4.61	134.1	3.76	2.97	4.43	1471.
200	4.48	33.773	199	26.783	129.1	4.47	127.1	4.09	3.60	3.35	1470.
225	4.25	33.792	223	26.824	125.4	4.23	123.2	4.41	4.29	3.10	1470.
250	4.04	33.810	248	26.859	122.1	4.02	119.8	4.72	5.03	2.88	1469.
300	3.95	33.876	298	26.921	116.6	3.93	114.0	5.32	6.71	2.30	1470.
400	3.85	33.991	397	27.022	107.8	3.82	104.3	6.44	10.71	1.67	1471.
500	3.74	34.082	496	27.105	100.7	3.71	96.3	7.48	15.48	1.19	1473.
600	3.57	34.166	595	27.189	93.3	3.52	88.4	8.45	20.92	1.15	1474.
700	3.38	34.235	694	27.262	87.0	3.33	81.4	9.35	26.88	.93	1475.
800	3.21	34.293	793	27.324	81.5	3.16	75.5	10.19	33.31	.75	1476.
900	3.05	34.335	892	27.373	77.3	2.99	70.8	10.98	40.19	.68	1477.
1000	2.91	34.373	990	27.416	73.5	2.84	66.7	11.74	47.49	.62	1478.
1200	2.65	34.438	1188	27.490	67.1	2.57	59.5	13.14	63.20	.67	1480.
1500	2.32	34.505	1484	27.572	60.0	2.22	51.7	15.03	89.26	.91	1484.
2000	1.96	34.572	1976	27.654	53.0	1.82	43.7	17.86	139.61	1.63	1491.
2500	1.75	34.624	2467	27.712	48.3	1.57	37.9	20.38	197.28	2.19	1498.
3000	1.62	34.655	2957	27.747	45.9	1.40	34.4	22.73	263.17	2.61	1506.
3500	1.55	34.684	3445	27.775	44.3	1.28	31.4	24.97	337.34	3.10	1514.
4000	1.51	34.686	3933	27.779	44.9	1.19	30.7	27.16	420.87	3.34	1523.
4100	1.52	34.678	4031	27.772	45.8	1.19	31.3	27.61	439.69	3.32	1524.



OFFSHORE OCEANOGRAPHY GROUP
 REFERENCE NO. 79- 4- 66
 POSITION 50- .0 N, 145-
 HYDROGRAPHIC CAST DATA

DATE 16/ 6/79 GMT 18.8
 .0 W

STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.93	32.587	0	25.265	271.4	8.93	271.4	.00	.00	6.89*	1483.
31	8.93	32.587	31	25.265	272.0	8.93	271.4	.85	.13	6.89	1484.
51	8.15	32.596	51	25.390	260.4	8.14	259.5	1.38	.36	6.88	1481.
76	6.58	32.632	76	25.635	237.2	6.57	236.2	2.01	.77	6.95	1476.
101	5.64	32.708	100	25.811	220.6	5.63	219.4	2.56	1.27	6.83	1472.
150	4.73	33.427	149	26.483	157.2	4.72	155.6	3.49	2.43	5.43	1470.
198	4.56	33.762	197	26.766	130.7	4.55	128.7	4.18	3.66	3.87	1471.
249	4.28	33.843	247	26.861	122.1	4.26	119.7	4.81	5.10	3.01	1471.

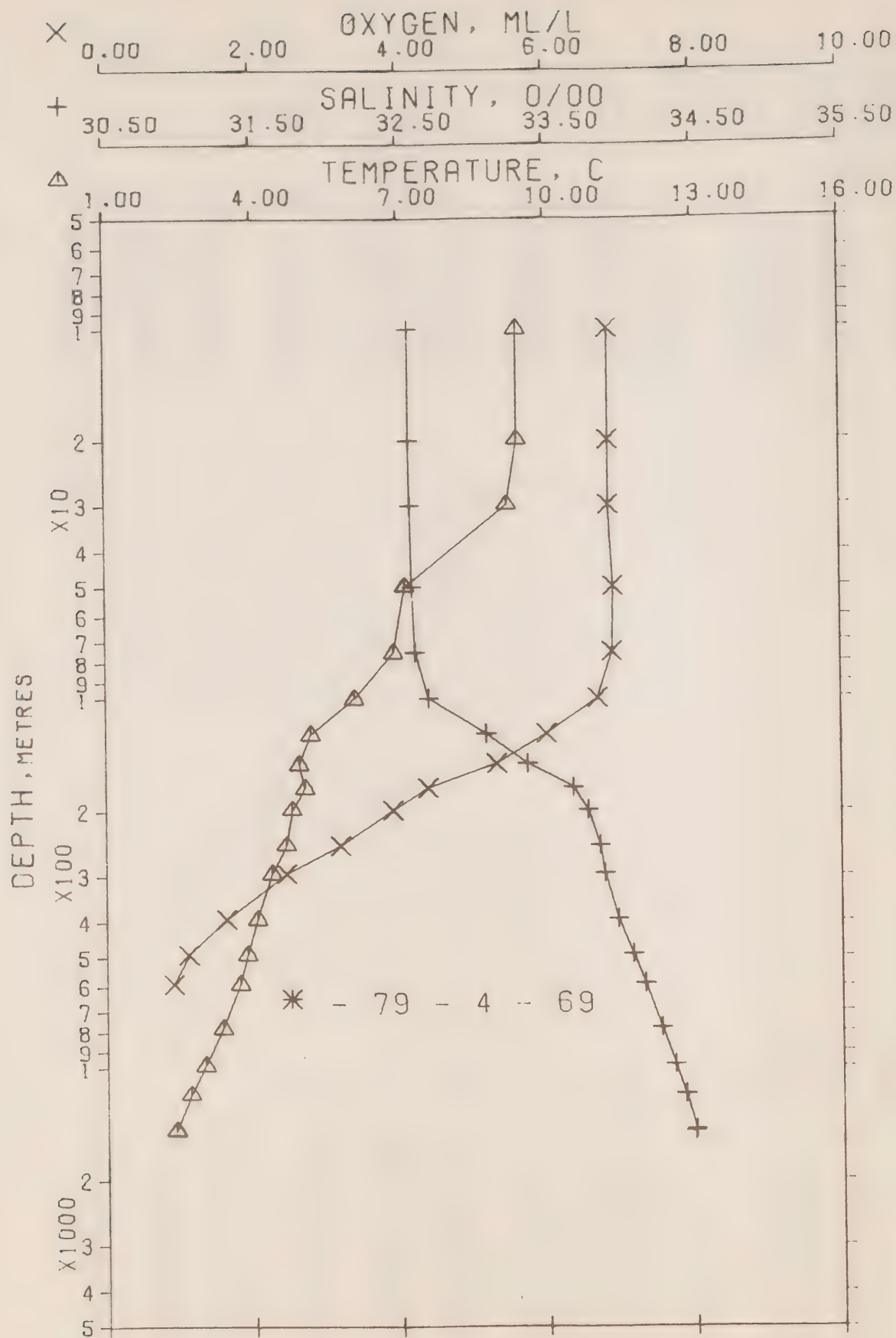
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OFFSHORE OCEANOGRAPHY GROUP
 REFERENCE NO. 79- 4- 66
 POSITION 50- .0 N, 145-
 INTERPOLATED TO STANDARD PRESSURE

DATE 16/ 6/79 GMT 18.8

STATION P

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	8.93	32.587	0	25.265	271.4	8.93	271.4	.00	.00	6.89	1483.
10	8.93	32.587	10	25.265	271.6	8.93	271.4	.27	.01	6.89	1483.
20	8.93	32.587	20	25.265	271.8	8.93	271.4	.54	.06	6.89	1484.
30	8.93	32.587	30	25.265	272.0	8.93	271.4	.82	.12	6.89	1484.
50	8.19	32.596	50	25.383	261.0	8.19	260.1	1.35	.34	6.88	1481.
75	6.66	32.630	75	25.623	238.3	6.65	237.3	1.98	.74	6.95	1476.
100	5.66	32.706	99	25.807	220.9	5.65	219.8	2.55	1.25	6.84	1472.
125	5.15	33.098	124	26.177	186.0	5.14	184.7	3.06	1.84	6.07	1471.
150	4.73	33.427	149	26.483	157.2	4.72	155.6	3.49	2.43	5.43	1470.
175	4.64	33.612	174	26.639	142.5	4.62	140.8	3.86	3.05	4.57	1471.
200	4.55	33.765	199	26.770	130.4	4.53	128.3	4.20	3.70	3.83	1471.
225	4.40	33.807	223	26.819	125.9	4.39	123.7	4.52	4.39	3.39	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 69

DATE 17/ 6/79

GMT 18.5

POSITION 49-49.0 N, 142-40.0 W

STATION 12

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	9.55	32.573	0	25.156	281.8	9.55	281.8	.00	.00	6.95	1486.
10	9.44	32.575	10	25.175	280.2	9.44	280.0	.28	.01	6.86	1485.
20	9.42	32.575	20	25.178	280.0	9.42	279.6	.56	.06	6.85	1485.
30	9.23	32.578	30	25.211	277.1	9.23	276.5	.84	.13	6.87	1485.
50	7.12	32.595	50	25.534	246.5	7.12	245.8	1.37	.35	6.93	1477.
75	6.88	32.607	75	25.576	242.9	6.87	241.8	1.98	.74	6.89	1477.
101	6.07	32.699	100	25.752	226.3	6.06	225.0	2.57	1.27	6.69	1474.
126	5.16	33.085	125	26.164	187.2	5.15	185.9	3.09	1.87	5.99	1471.
151	4.92	33.370	150	26.417	163.5	4.91	161.9	3.54	2.49	5.31	1471.
175	5.06	33.680	174	26.646	142.1	5.05	140.1	3.91	3.10	4.38	1472.
200	4.79	33.779	199	26.755	132.0	4.77	129.8	4.25	3.76	3.90	1472.
250	4.65	33.862	248	26.836	124.7	4.63	122.1	4.88	5.21	3.18	1472.
299	4.36	33.894	297	26.892	119.6	4.34	116.6	5.48	6.89	2.44	1472.
398	4.05	33.984	395	26.996	110.4	4.02	106.7	6.62	10.93	1.61	1472.
497	3.86	34.079	493	27.091	102.1	3.82	97.7	7.67	15.73	1.11	1473.
596	3.69	34.163	591	27.175	94.8	3.65	89.7	8.64	21.15	.90	1474.
787	3.34	34.274	780	27.297	84.2	3.28	78.0	10.35	33.15		1476.
993	2.98	34.362	983	27.400	75.1	2.91	68.1	11.98	47.93		1478.
1188	2.68	34.430	1176	27.481	68.0	2.60	60.4	13.37	63.40		1480.
1482	2.39	34.497	1466	27.559	61.3	2.29	52.9	15.24	88.69		1484.
1493	2.38	34.494	1477	27.558	61.5	2.28	53.0	15.30	89.73		1484.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 69

DATE 17/ 6/79

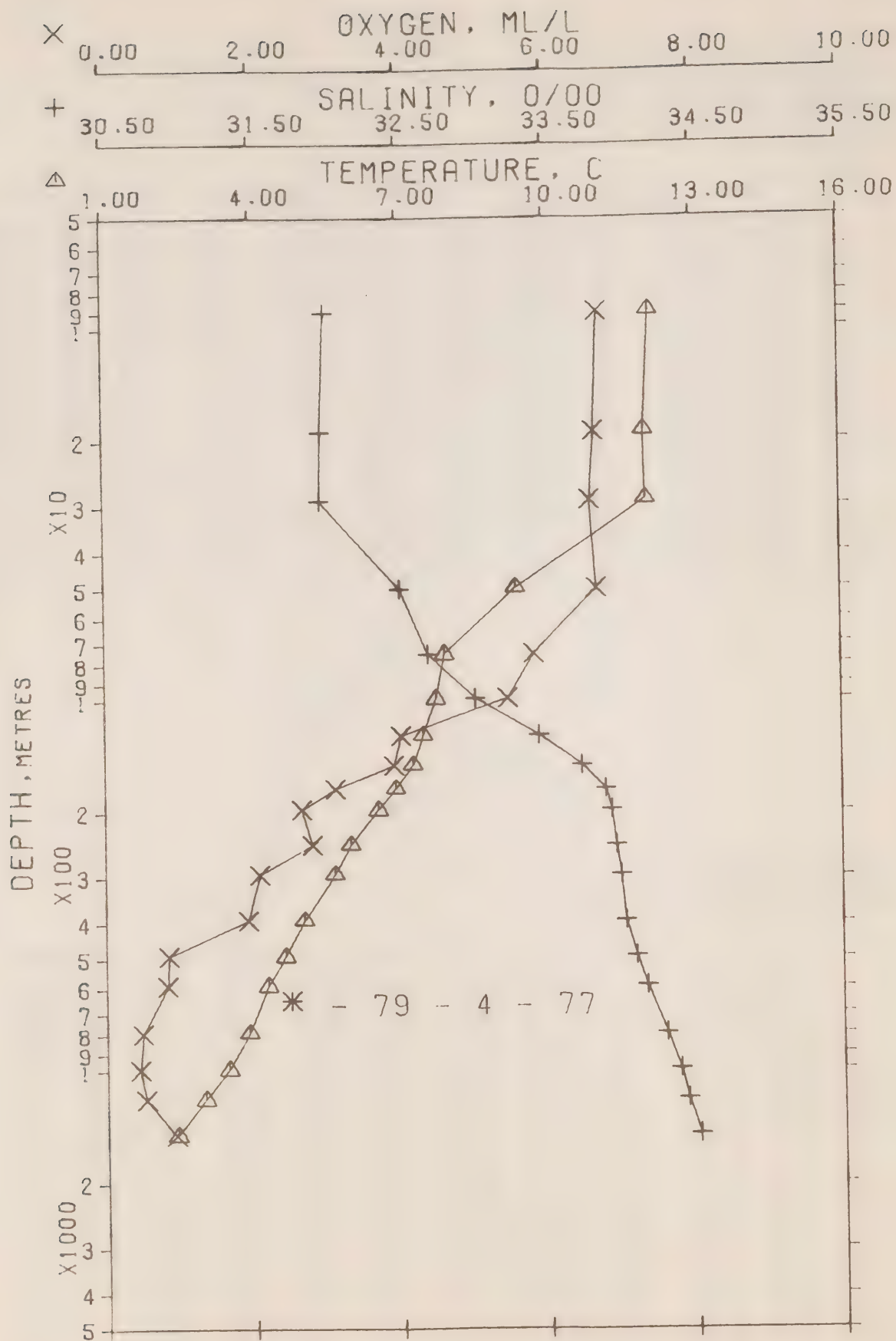
GMT 18.5

POSITION 49-49.0 N, 142-40.0 W

STATION 12

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	9.55	32.573	0	25.156	281.8	9.55	281.8	.00	.00	6.95	1486.
10	9.44	32.575	10	25.175	280.2	9.44	280.0	.28	.01	6.86	1485.
20	9.42	32.575	20	25.178	280.0	9.42	279.6	.56	.06	6.85	1485.
30	9.23	32.578	30	25.211	277.1	9.23	276.5	.84	.13	6.87	1485.
50	7.12	32.595	50	25.534	246.5	7.12	245.8	1.37	.35	6.93	1477.
75	6.88	32.607	75	25.576	242.9	6.87	241.8	1.98	.74	6.89	1477.
100	6.09	32.697	99	25.748	226.6	6.08	225.4	2.56	1.25	6.70	1474.
125	5.19	33.074	124	26.153	188.3	5.18	187.0	3.08	1.85	6.01	1471.
150	4.93	33.360	149	26.408	164.3	4.92	162.7	3.52	2.46	5.34	1471.
175	5.06	33.680	174	26.646	142.1	5.05	140.1	3.91	3.10	4.38	1472.
200	4.79	33.779	199	26.755	132.0	4.77	129.8	4.25	3.76	3.90	1472.
225	4.72	33.823	223	26.797	128.1	4.70	125.7	4.57	4.45	3.52	1472.
250	4.65	33.862	248	26.836	124.7	4.63	122.1	4.88	5.21	3.18	1472.
300	4.36	33.895	298	26.893	119.5	4.33	116.6	5.49	6.92	2.43	1472.
400	4.05	33.986	397	26.998	110.3	4.02	106.5	6.64	11.02	1.60	1472.
500	3.85	34.082	496	27.094	101.9	3.82	97.4	7.70	15.88	1.10	1473.
600	3.68	34.166	595	27.178	94.6	3.64	89.4	8.68	21.38	.88	1474.
700	3.49	34.227	694	27.246	88.7	3.44	83.0	9.60	27.44		1475.
800	3.31	34.280	793	27.304	83.6	3.26	77.3	10.46	34.02		1476.
900	3.13	34.325	892	27.357	79.0	3.07	72.3	11.27	41.06		1477.
1000	2.97	34.365	990	27.404	74.8	2.90	67.8	12.04	48.50		1478.
1200	2.67	34.433	1188	27.485	67.7	2.59	60.1	13.46	64.39		1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 77

DATE 20/ 6/79

GMT .1

POSITION 48-46.0 N, 127-40.0 W

STATION 4

HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	12.27	32.125	0	24.332	360.3	12.27	360.3	.00	.00	6.77	1495.
9	12.16	32.007	9	24.262	367.2	12.16	367.0	.33	.02	6.74	1494.
19	12.05	31.978	19	24.260	367.6	12.05	367.1	.70	.07	6.68	1494.
29	12.06	31.974	29	24.255	368.3	12.06	367.6	1.07	.16	6.62	1494.
50	9.40	32.511	50	25.132	285.0	9.39	284.0	1.76	.44	6.71	1486.
75	7.94	32.698	75	25.500	250.2	7.93	249.0	2.43	.87	5.84	1481.
100	7.75	33.020	99	25.780	224.0	7.74	222.4	3.01	1.38	5.47	1481.
125	7.49	33.447	124	26.151	189.1	7.48	187.1	3.53	1.97	4.02	1481.
150	7.26	33.739	149	26.413	164.7	7.25	162.2	3.97	2.59	3.92	1481.
174	6.90	33.900	173	26.589	148.2	6.88	145.5	4.35	3.21	3.13	1480.
199	6.56	33.942	198	26.667	141.0	6.54	138.0	4.71	3.90	2.66	1479.
248	5.98	33.966	246	26.761	132.5	5.96	129.1	5.37	5.41	2.79	1478.
297	5.66	33.997	295	26.825	126.9	5.63	123.0	6.01	7.18	2.09	1477.
395	5.01	34.026	392	26.925	118.0	4.98	113.4	7.21	11.41	1.92	1476.
496	4.64	34.096	492	27.022	109.6	4.60	104.2	8.36	16.61	.84	1476.
597	4.27	34.167	592	27.118	101.0	4.22	95.0	9.42	22.52	.82	1477.
798	3.87	34.298	791	27.264	88.4	3.81	81.1	11.31	35.98	.47	1478.
999	3.46	34.393	990	27.380	78.3	3.39	70.0	12.99	51.28	.44	1480.
1201	2.99	34.444	1189	27.465	70.5	2.91	61.9	14.49	68.08	.51	1482.
1505	2.42	34.521	1489	27.576	60.0	2.32	51.3	16.47	95.37	.93	1484.

OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 77

DATE 20/ 6/79

GMT .1

POSITION 48-46.0 N, 127-40.0 W

STATION 4

INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	12.27	32.125	0	24.332	360.3	12.27	360.3	.00	.00	6.77	1495.
10	12.15	32.003	10	24.262	367.2	12.14	367.0	.36	.02	6.73	1494.
20	12.05	31.978	20	24.259	367.6	12.05	367.2	.73	.07	6.67	1494.
30	11.92	32.002	30	24.303	363.7	11.92	363.0	1.10	.17	6.63	1494.
50	9.40	32.511	50	25.132	285.0	9.39	284.0	1.76	.44	6.71	1486.
75	7.94	32.698	75	25.500	250.2	7.93	249.0	2.43	.87	5.84	1481.
100	7.75	33.020	99	25.780	224.0	7.74	222.4	3.01	1.38	5.47	1481.
125	7.49	33.447	124	26.151	189.1	7.48	187.1	3.53	1.97	4.02	1481.
150	7.26	33.739	149	26.413	164.7	7.25	162.2	3.97	2.59	3.92	1481.
175	6.89	33.902	174	26.592	148.0	6.87	145.2	4.36	3.23	3.11	1480.
200	6.55	33.942	199	26.669	140.9	6.53	137.9	4.72	3.92	2.67	1479.
225	6.24	33.955	223	26.720	136.2	6.22	133.0	5.07	4.67	2.74	1478.
250	5.96	33.968	248	26.764	132.2	5.94	128.8	5.40	5.48	2.76	1478.
300	5.64	33.998	298	26.829	126.6	5.61	122.6	6.05	7.30	2.08	1477.
400	4.99	34.030	397	26.930	117.6	4.96	112.9	7.27	11.65	1.86	1476.
500	4.62	34.099	496	27.026	109.2	4.58	103.8	8.40	16.84	.84	1476.
600	4.26	34.169	595	27.121	100.8	4.22	94.7	9.45	22.71	.81	1477.
700	4.05	34.239	694	27.198	94.0	4.00	87.4	10.42	29.15	.63	1477.
800	3.87	34.299	793	27.265	88.3	3.81	81.0	11.33	36.12	.47	1478.
900	3.65	34.349	892	27.326	83.0	3.58	75.1	12.19	43.54	.45	1479.
1000	3.46	34.393	991	27.380	78.2	3.39	70.0	12.99	51.33	.44	1480.
1200	2.99	34.444	1188	27.464	70.5	2.91	61.9	14.48	68.00	.51	1482.
1500	2.43	34.520	1484	27.574	60.2	2.33	51.4	16.43	94.89	.92	1484.

Results of STD Observations

(P-79-4)

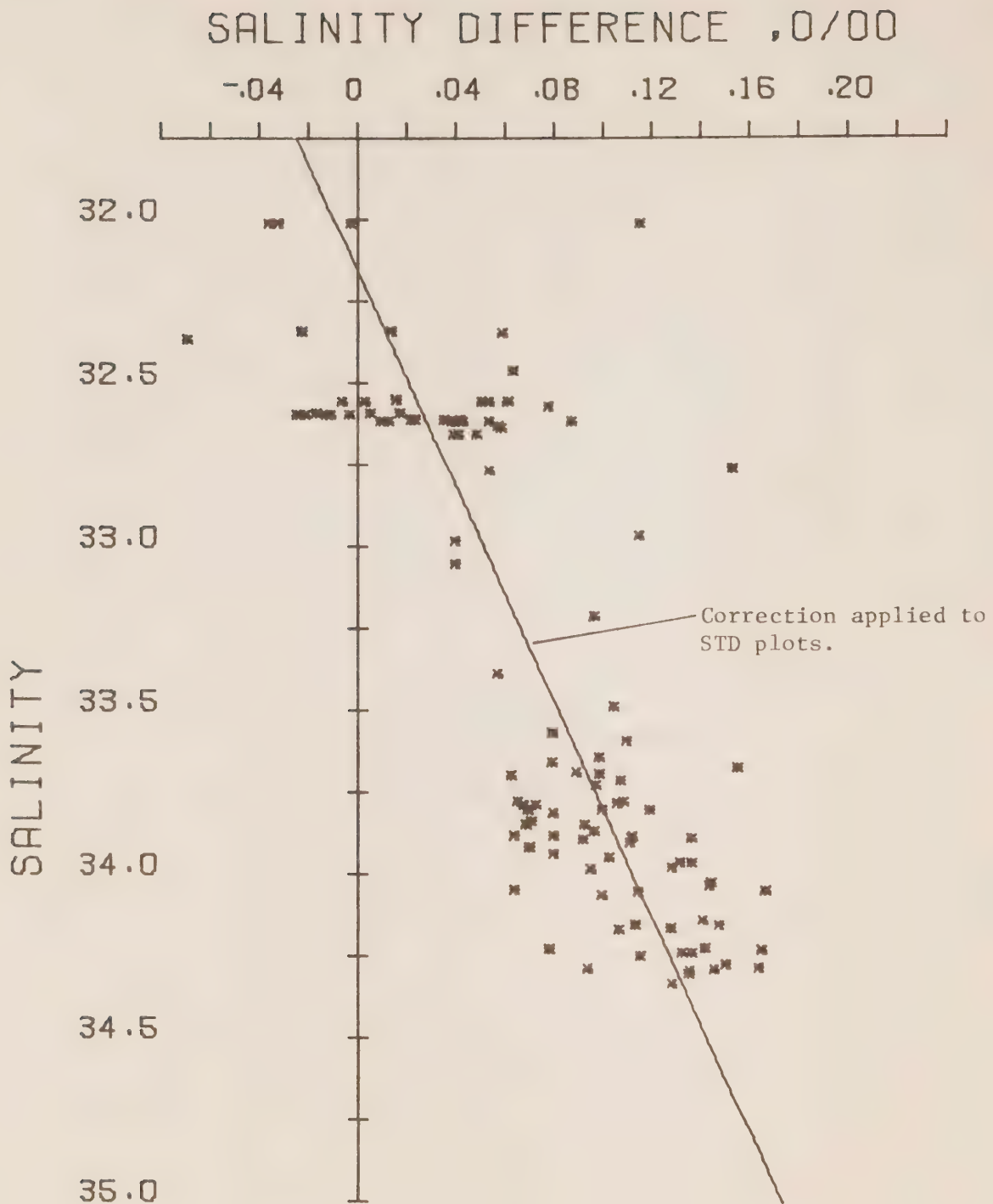


Figure 8. Salinity difference between hydro data and STD.
P-79-4.

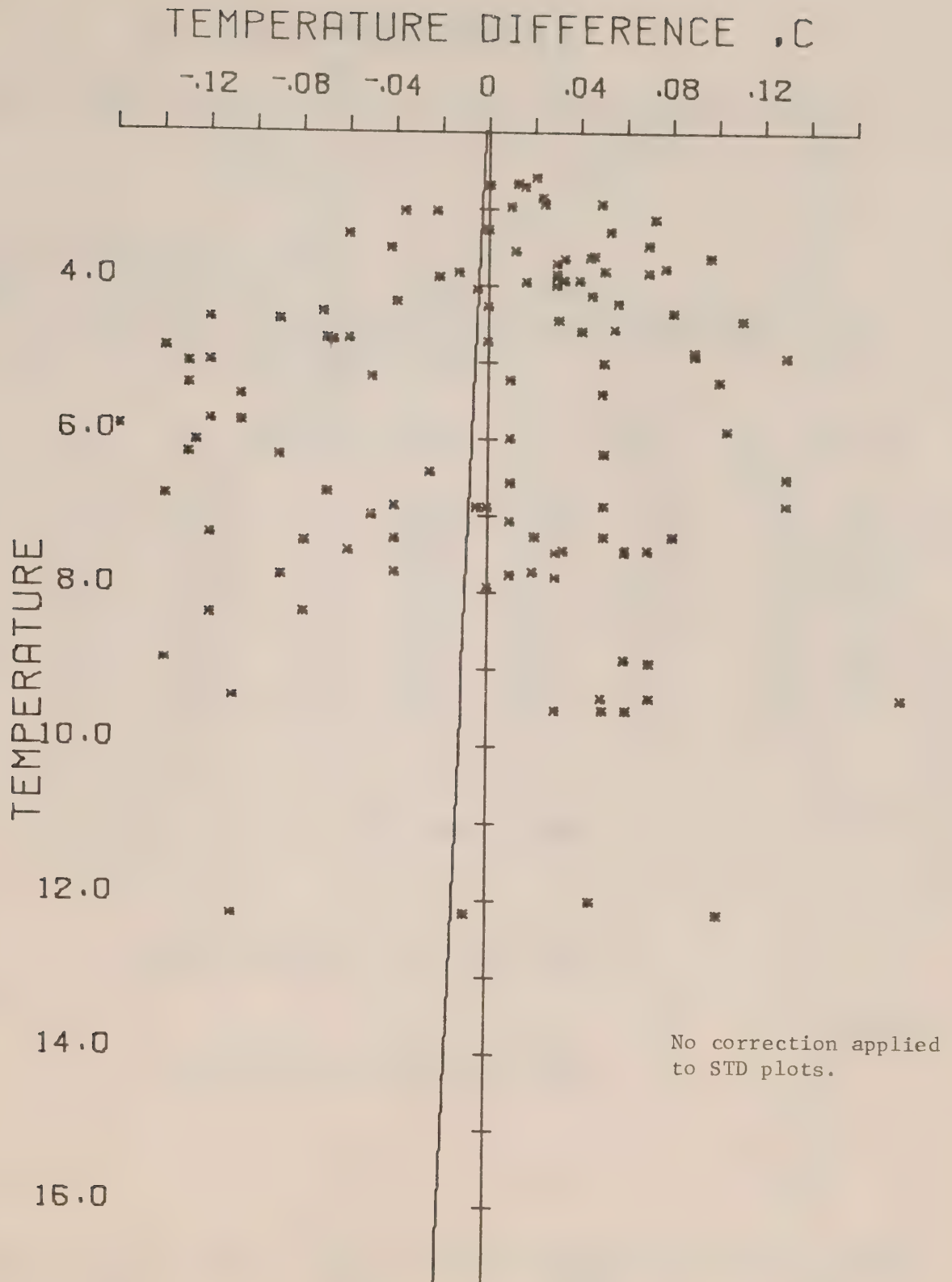
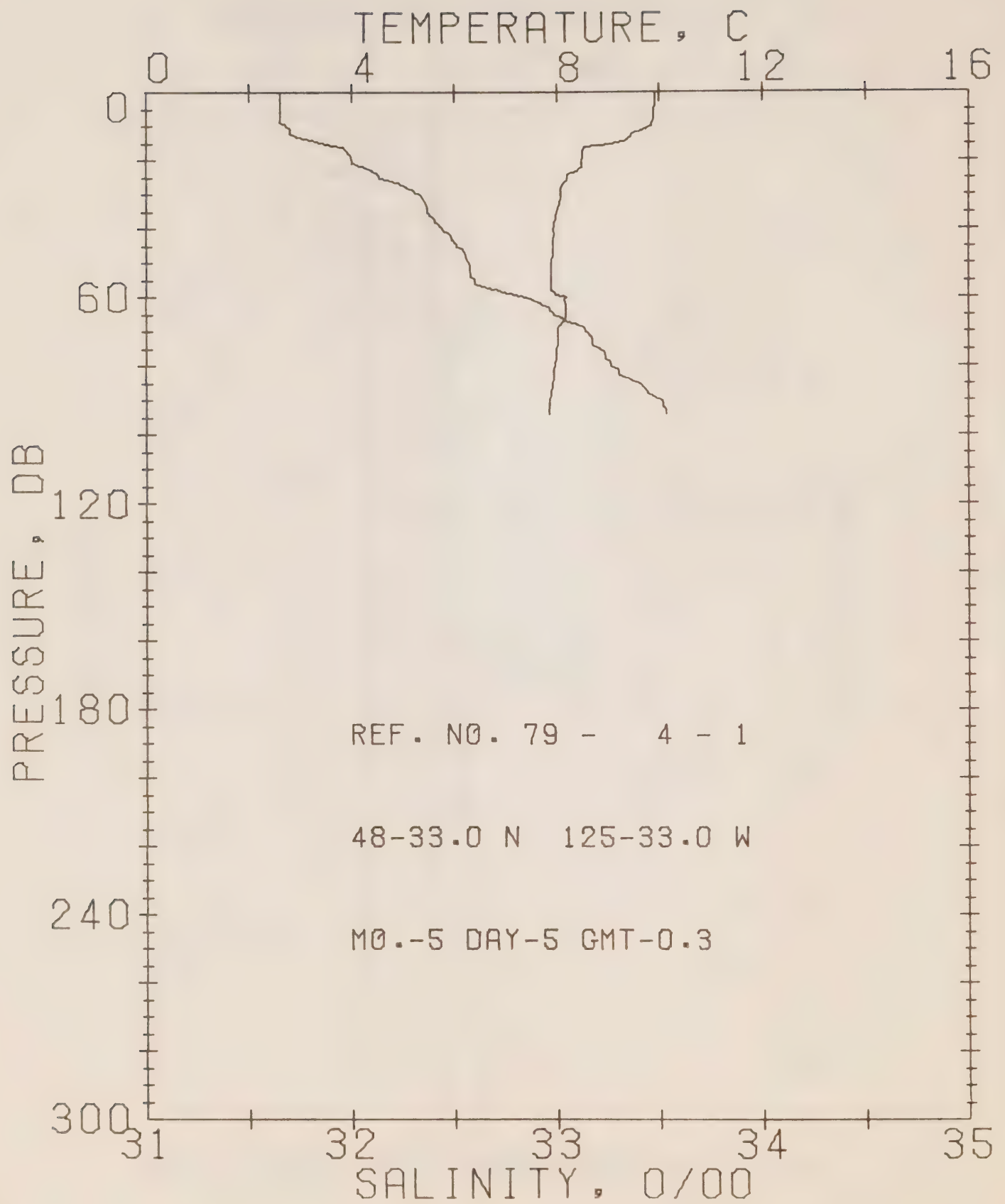


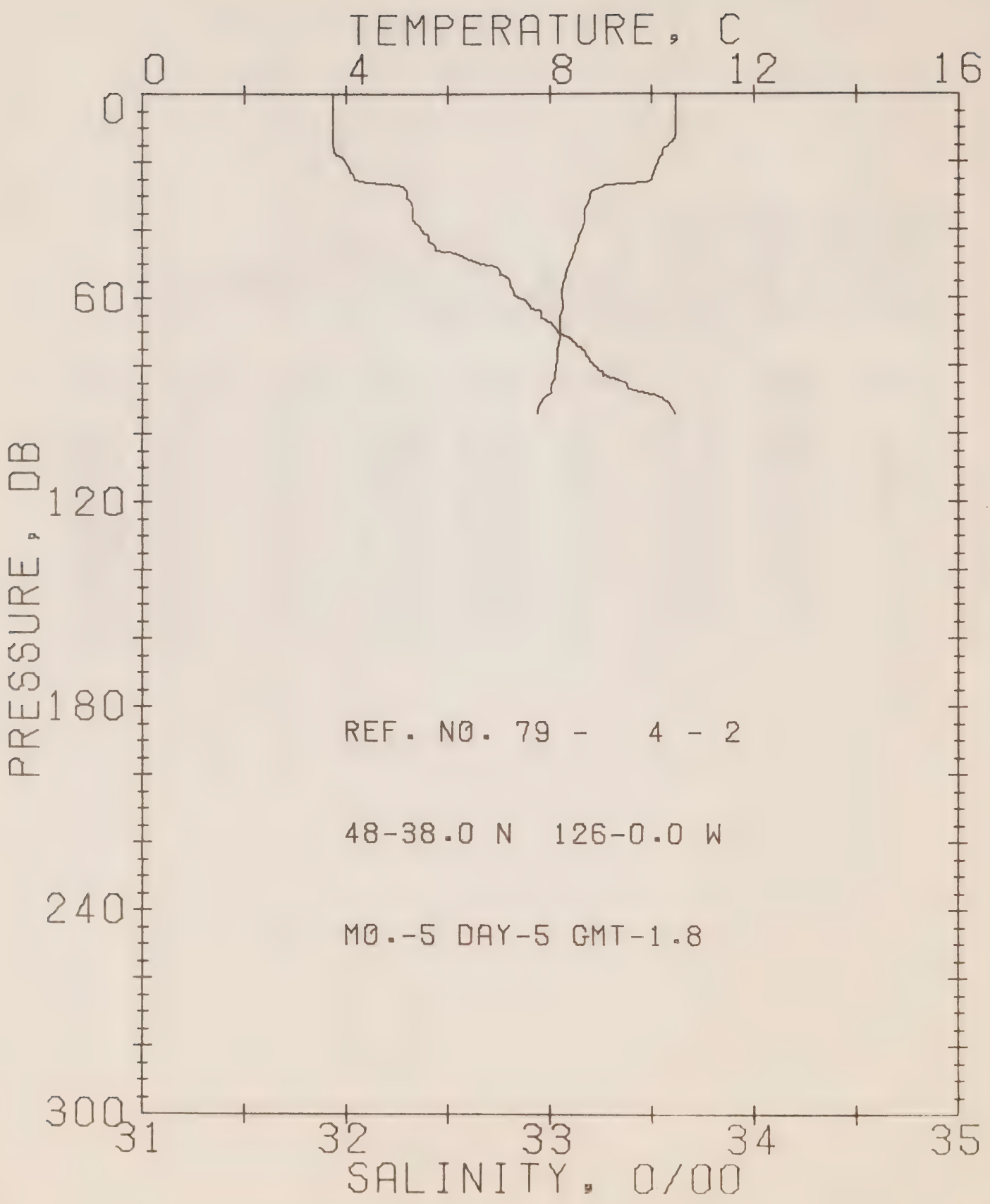
Figure 9. Temperature difference between hydro data and STD.
P-79-4.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 1 DATE 5/ 5/79
 POSITION 48-33.0N, 125-33.0W GMT .3 STATION 1
 RESULTS OF STP CAST 82 POINTS TAKEN FROM ANALOG TRACE
 GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.92	31.65	0	24.38	355.9	.00	.00	1486.
10	9.83	31.68	10	24.42	352.5	.36	.02	1486.
20	8.50	32.00	20	24.87	309.4	.68	.07	1481.
30	8.08	32.32	30	25.18	279.5	.98	.14	1480.
40	7.93	32.44	40	25.30	268.7	1.25	.24	1480.
50	7.90	32.56	50	25.40	259.2	1.52	.36	1480.
60	8.19	32.85	60	25.58	242.2	1.77	.50	1482.
70	8.04	33.14	70	25.83	218.7	2.00	.66	1482.
80	7.97	33.27	80	25.94	208.2	2.21	.82	1482.
90	7.87	33.51	89	26.15	189.2	2.41	.99	1482.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 2

DATE 5/ 5/79

POSITION 48-38.0N, 126-

.0W

GMT 1.8

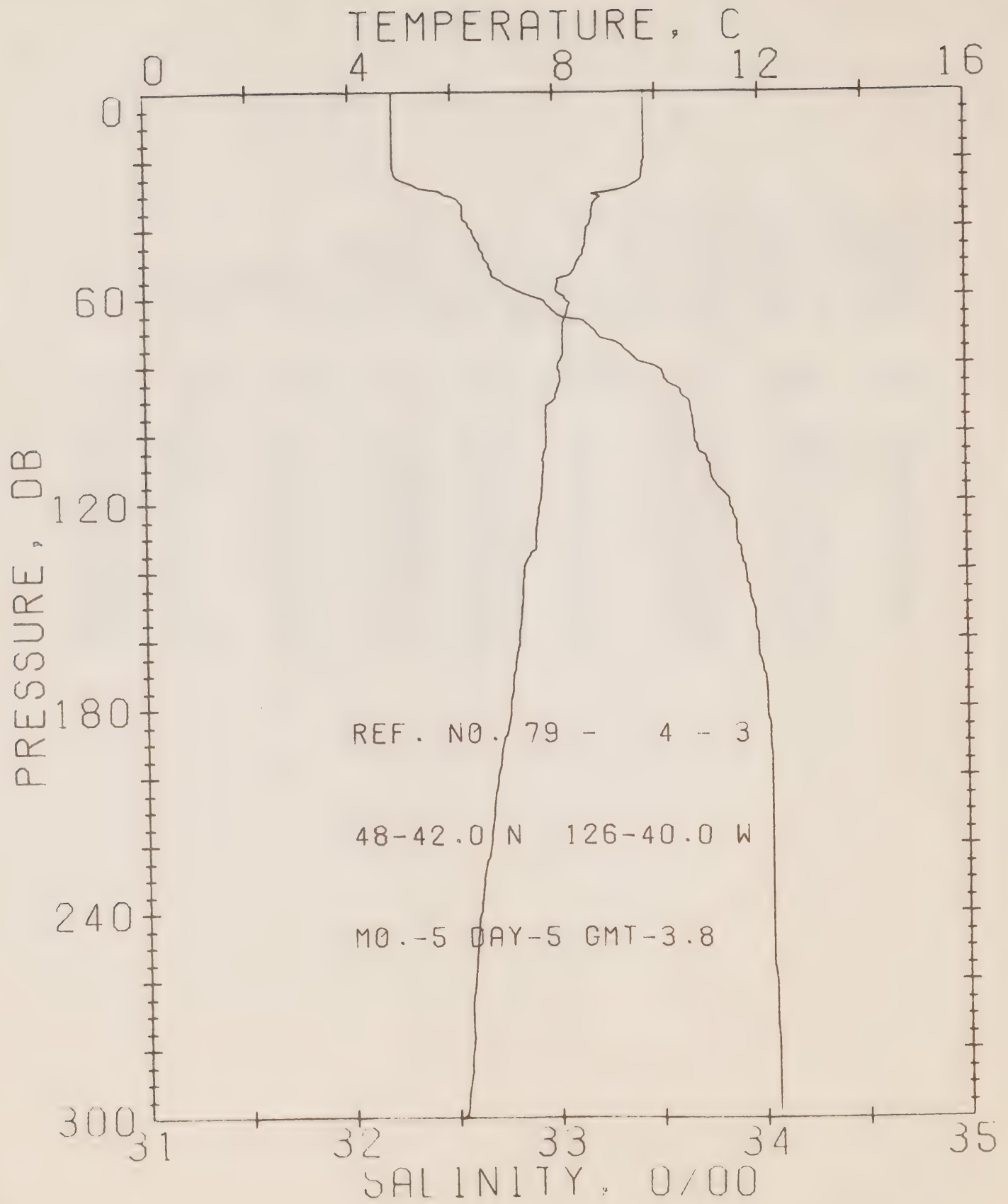
STATION 2

RESULTS OF STP CAST

83 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.49	31.93	0	24.50	344.3	.00	.00	1488.
10	10.49	31.93	10	24.50	344.4	.34	.02	1488.
20	10.14	31.99	20	24.61	334.6	.69	.07	1487.
30	8.81	32.30	30	25.06	291.5	1.00	.15	1483.
40	8.64	32.37	40	25.14	284.0	1.29	.25	1483.
50	8.39	32.66	50	25.40	259.0	1.57	.38	1482.
60	8.25	32.85	60	25.57	243.1	1.81	.52	1482.
70	8.21	33.04	70	25.73	228.5	2.05	.67	1482.
80	8.14	33.22	80	25.88	214.3	2.27	.84	1482.
90	7.88	33.56	89	26.18	185.6	2.47	1.02	1482.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 3

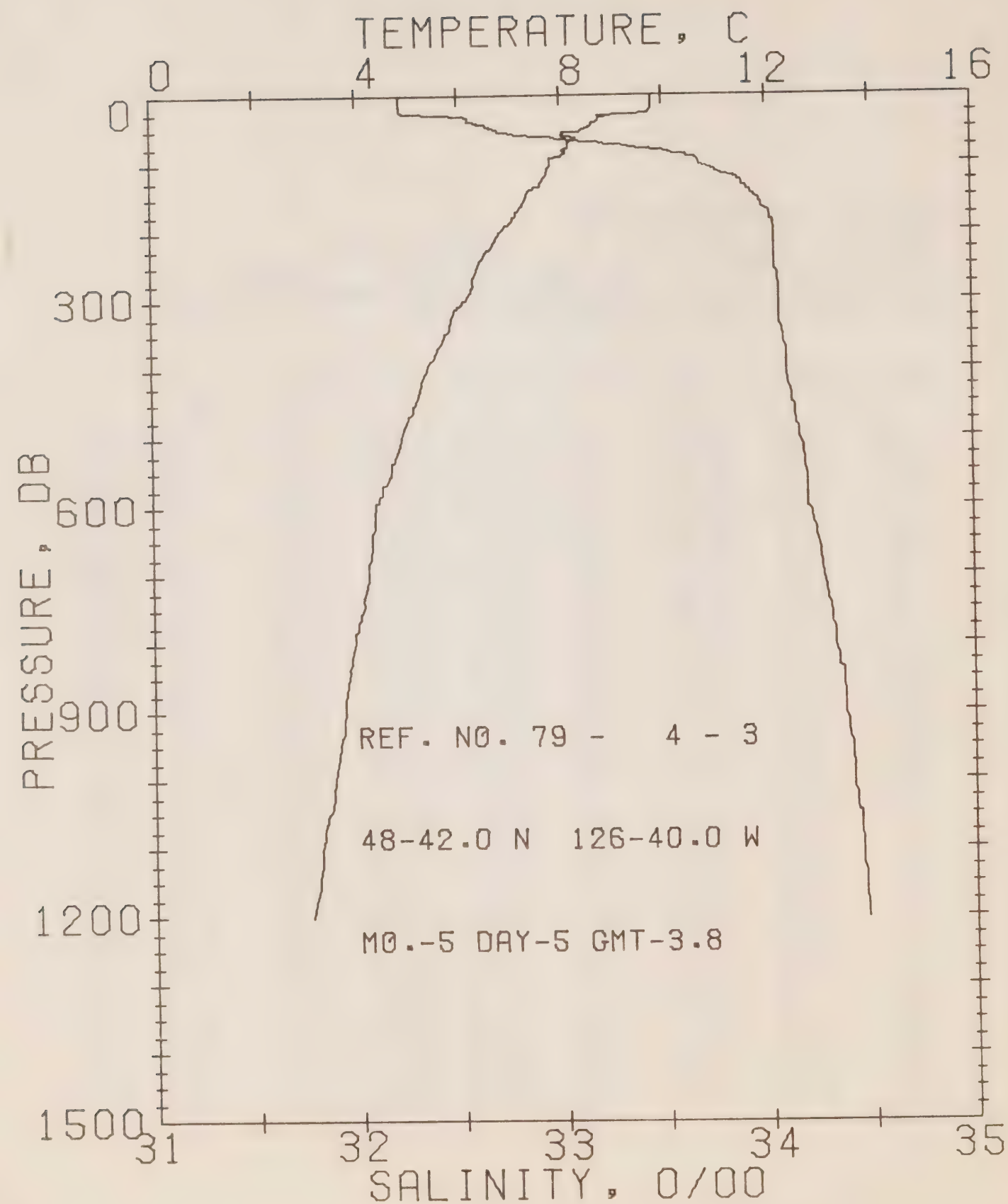
DATE 5/ 5/79

POSITION 48-42.0N, 126-40.0W GMT 3.8 STATION 3

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.80	32.21	0	24.83	312.6	.00	.00	1486.
10	9.80	32.21	10	24.83	312.8	.31	.02	1486.
20	9.79	32.21	20	24.83	312.8	.63	.06	1486.
30	8.76	32.47	30	25.20	278.1	.93	.14	1483.
40	8.65	32.60	40	25.32	267.0	1.20	.24	1483.
50	8.46	32.68	50	25.41	258.5	1.47	.36	1482.
60	8.20	32.91	60	25.63	237.9	1.72	.50	1482.
70	8.15	33.20	70	25.86	215.8	1.94	.65	1482.
80	8.05	33.48	80	26.10	193.8	2.15	.81	1482.
90	8.01	33.65	89	26.24	180.7	2.34	.97	1483.
100	7.81	33.68	99	26.29	175.8	2.52	1.14	1482.
110	7.75	33.75	109	26.35	170.0	2.69	1.33	1482.
120	7.69	33.85	119	26.44	161.8	2.86	1.52	1482.
130	7.60	33.88	129	26.48	158.6	3.01	1.73	1482.
140	7.36	33.92	139	26.54	152.2	3.17	1.94	1481.
150	7.32	33.96	149	26.58	148.8	3.32	2.16	1481.
160	7.24	33.98	159	26.60	146.7	3.47	2.40	1481.
170	7.14	34.01	169	26.64	143.2	3.61	2.64	1481.
180	7.06	34.02	179	26.66	141.6	3.76	2.89	1481.
190	6.92	34.03	189	26.69	139.1	3.90	3.16	1481.
200	6.81	34.04	199	26.71	137.0	4.04	3.43	1480.
210	6.73	34.04	209	26.72	136.1	4.17	3.72	1480.
220	6.65	34.04	218	26.73	135.1	4.31	4.02	1480.
230	6.51	34.04	228	26.75	133.5	4.44	4.32	1480.
240	6.45	34.04	238	26.76	132.9	4.57	4.64	1480.
250	6.38	34.04	248	26.77	132.1	4.71	4.97	1479.
260	6.33	34.05	258	26.78	130.9	4.84	5.32	1479.
270	6.28	34.05	268	26.79	130.4	4.97	5.67	1479.
280	6.26	34.06	278	26.80	129.5	5.10	6.03	1479.
290	6.20	34.06	288	26.81	128.9	5.23	6.41	1479.
300	6.09	34.06	298	26.82	127.6	5.36	6.79	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 3

DATE 5/ 5/79

POSITION 48-42.0N, 126-40.0W

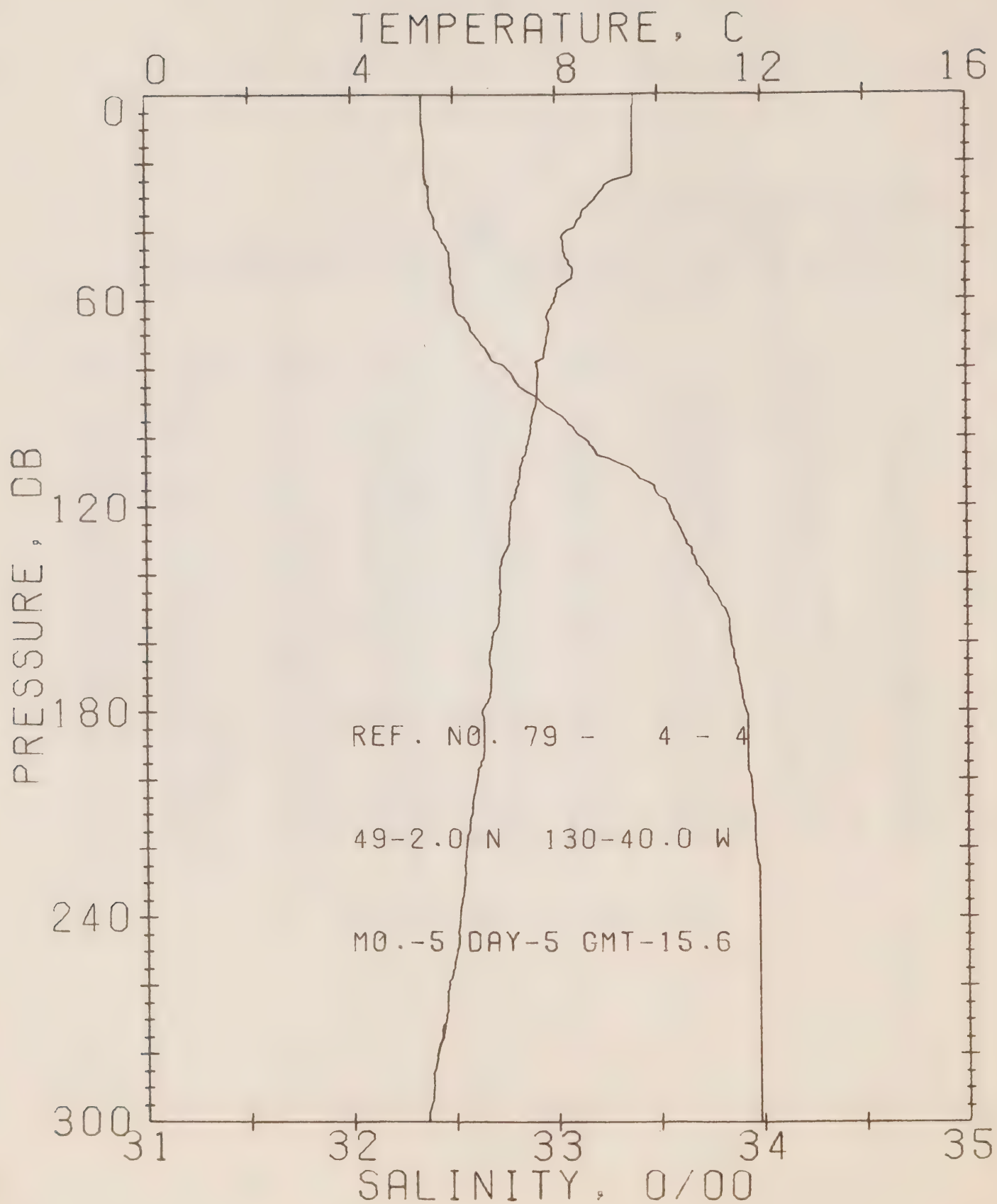
GMT 3.8

STATION 3

RESULTS OF STP CAST 337 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.80	32.21	0	24.83	312.6	.00	.00	1486.
10	9.80	32.21	10	24.83	312.8	.31	.02	1486.
20	9.79	32.21	20	24.83	312.8	.63	.06	1486.
30	8.76	32.47	30	25.20	278.1	.93	.14	1483.
50	8.46	32.68	50	25.41	258.5	1.47	.36	1482.
75	8.15	33.34	75	25.97	205.5	2.05	.73	1483.
100	7.81	33.68	99	26.29	175.8	2.52	1.14	1482.
125	7.64	33.88	124	26.47	159.0	2.94	1.62	1482.
150	7.32	33.96	149	26.58	148.8	3.32	2.16	1481.
175	7.11	34.02	174	26.65	142.2	3.69	2.77	1481.
200	6.81	34.04	199	26.71	137.0	4.04	3.43	1480.
225	6.55	34.04	223	26.75	134.0	4.37	4.17	1480.
250	6.38	34.04	248	26.77	132.1	4.71	4.97	1479.
300	6.09	34.06	298	26.82	127.6	5.36	6.79	1479.
400	5.37	34.09	397	26.93	117.7	6.58	11.15	1478.
500	4.86	34.15	496	27.04	108.0	7.71	16.32	1477.
600	4.35	34.19	595	27.13	100.2	8.74	22.12	1477.
800	3.91	34.32	793	27.28	87.3	10.61	35.36	1479.
1000	3.50	34.41	991	27.39	77.5	12.24	50.31	1480.
1200	3.04	34.47	1188	27.48	69.1	13.70	66.63	1482.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 4

DATE 5/ 5/79

POSITION 49- 2.0N, 130-40.0W

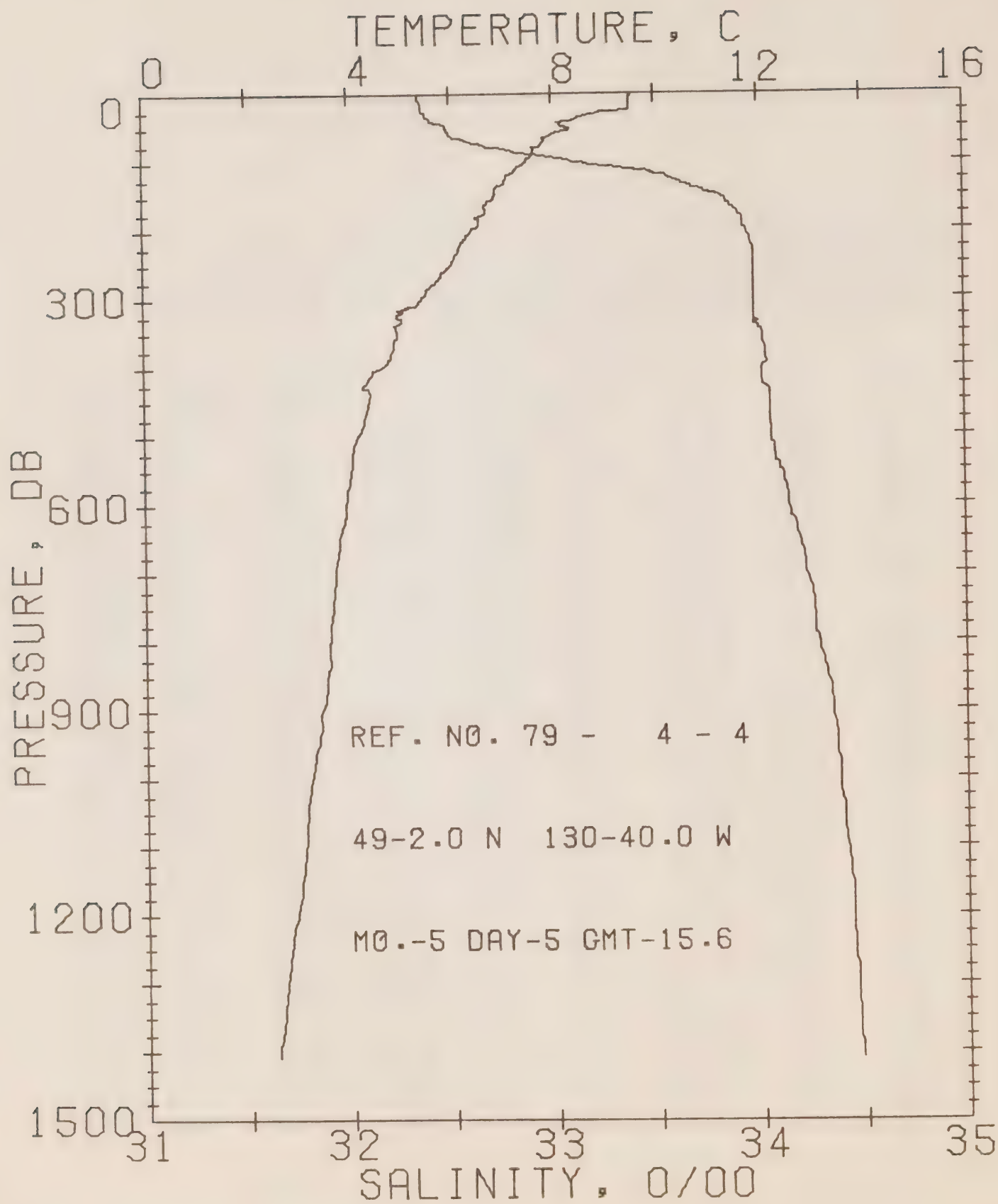
GMT 15.6

STATION 6

RESULTS OF STP CAST 194 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.54	32.35	0	24.98	298.2	.00	.00	1485.
10	9.53	32.35	10	24.99	297.9	.30	.02	1485.
20	9.53	32.36	20	24.99	297.6	.60	.06	1486.
30	8.79	32.38	30	25.13	285.2	.89	.14	1483.
40	8.21	32.43	40	25.25	273.4	1.17	.24	1481.
50	8.27	32.48	50	25.28	270.7	1.44	.36	1481.
60	7.98	32.50	60	25.34	265.3	1.71	.51	1481.
70	7.85	32.59	70	25.43	256.5	1.97	.68	1480.
80	7.64	32.76	80	25.59	241.6	2.22	.87	1480.
90	7.61	32.93	89	25.73	228.5	2.45	1.08	1480.
100	7.46	33.13	99	25.91	211.9	2.67	1.29	1480.
110	7.29	33.38	109	26.13	191.2	2.88	1.51	1480.
120	7.09	33.55	119	26.29	176.0	3.06	1.72	1479.
130	7.06	33.63	129	26.35	169.8	3.23	1.94	1480.
140	6.88	33.72	139	26.45	160.9	3.40	2.17	1479.
150	6.86	33.82	149	26.53	153.3	3.56	2.40	1479.
160	6.71	33.85	159	26.57	149.3	3.71	2.64	1479.
170	6.70	33.89	169	26.60	146.6	3.85	2.89	1479.
180	6.52	33.92	179	26.66	141.9	4.00	3.15	1479.
190	6.57	33.93	189	26.66	141.9	4.14	3.42	1479.
200	6.42	33.94	199	26.69	139.2	4.28	3.70	1479.
210	6.31	33.96	209	26.71	136.6	4.42	3.98	1478.
220	6.20	33.97	218	26.73	135.0	4.56	4.28	1478.
230	6.15	33.98	228	26.75	133.3	4.69	4.59	1478.
240	6.06	33.98	238	26.76	132.4	4.82	4.91	1478.
250	6.00	33.98	248	26.77	131.8	4.96	5.24	1478.
260	5.84	33.98	258	26.79	129.9	5.09	5.58	1477.
270	5.78	33.98	268	26.80	129.3	5.22	5.93	1477.
280	5.62	33.98	278	26.82	127.4	5.34	6.29	1477.
290	5.54	33.98	288	26.83	126.6	5.47	6.66	1477.
300	5.43	33.98	298	26.84	125.4	5.60	7.04	1476.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 4

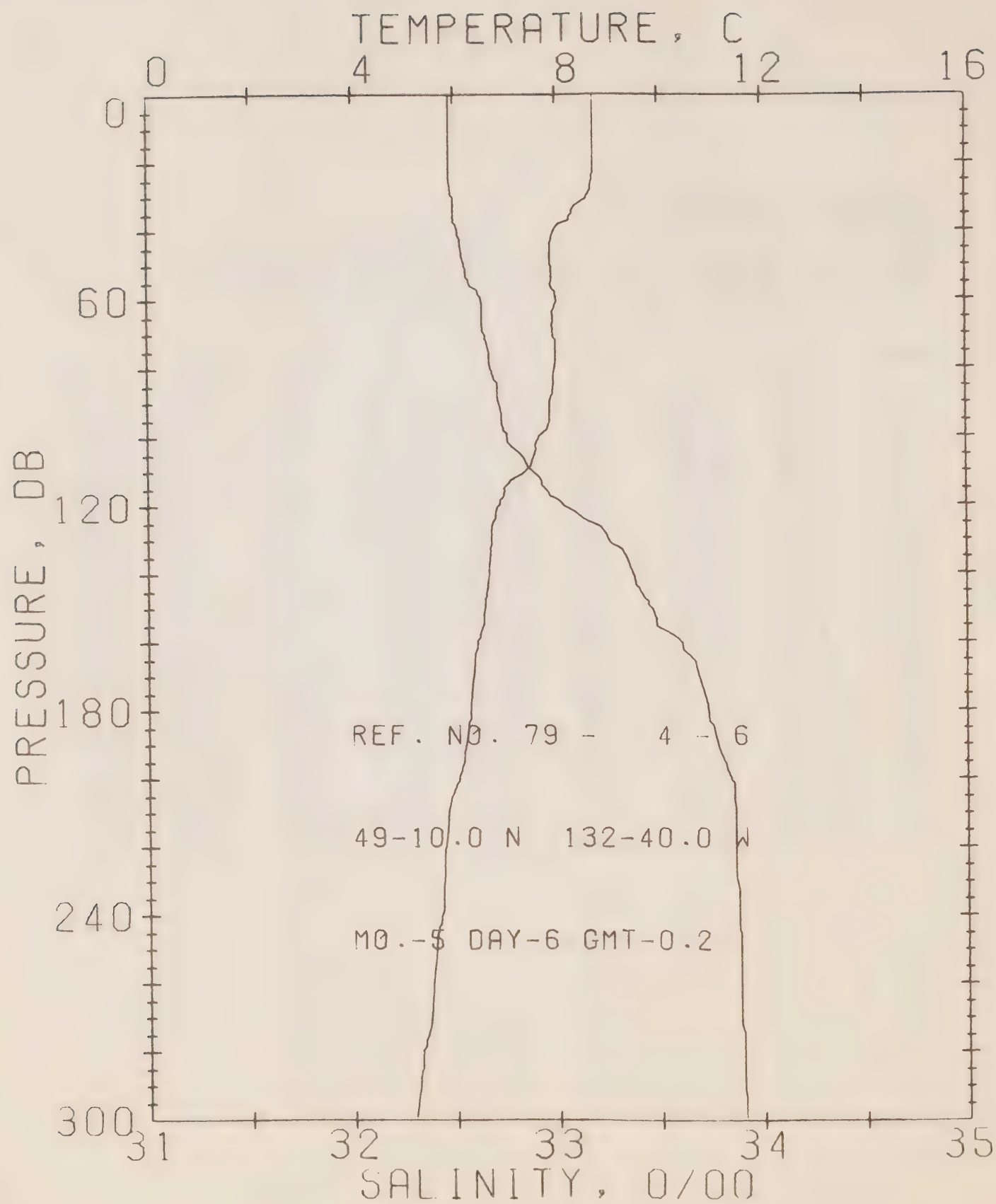
DATE 5/ 5/79

POSITION 49- 2.0N, 130-40.0W GMT 15.6 STATION 6

RESULTS OF STP CAST 411 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.54	32.35	0	24.98	298.2	.00	.00	1485.
10	9.53	32.35	10	24.99	297.9	.30	.02	1485.
20	9.53	32.36	20	24.99	297.6	.60	.06	1486.
30	8.79	32.38	30	25.13	285.2	.89	.14	1483.
50	8.27	32.48	50	25.28	270.7	1.44	.36	1481.
75	7.77	32.66	75	25.49	250.8	2.10	.78	1480.
100	7.46	33.13	99	25.91	211.9	2.67	1.29	1480.
125	7.07	33.59	124	26.32	172.8	3.15	1.83	1480.
150	6.86	33.82	149	26.53	153.3	3.56	2.40	1479.
175	6.68	33.90	174	26.62	145.4	3.93	3.02	1479.
200	6.42	33.94	199	26.69	139.2	4.28	3.70	1479.
225	6.16	33.98	223	26.75	133.4	4.62	4.43	1478.
250	6.00	33.98	248	26.77	131.8	4.96	5.24	1478.
300	5.43	33.98	298	26.84	125.4	5.60	7.04	1476.
400	4.63	34.02	397	26.96	114.2	6.78	11.25	1475.
500	4.16	34.06	496	27.05	106.8	7.88	16.29	1474.
600	3.93	34.14	595	27.13	99.2	8.91	22.03	1475.
800	3.58	34.29	793	27.28	86.0	10.74	35.06	1477.
1000	3.20	34.38	990	27.39	76.3	12.35	49.83	1479.
1200	2.90	34.44	1188	27.47	69.8	13.81	66.13	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 6

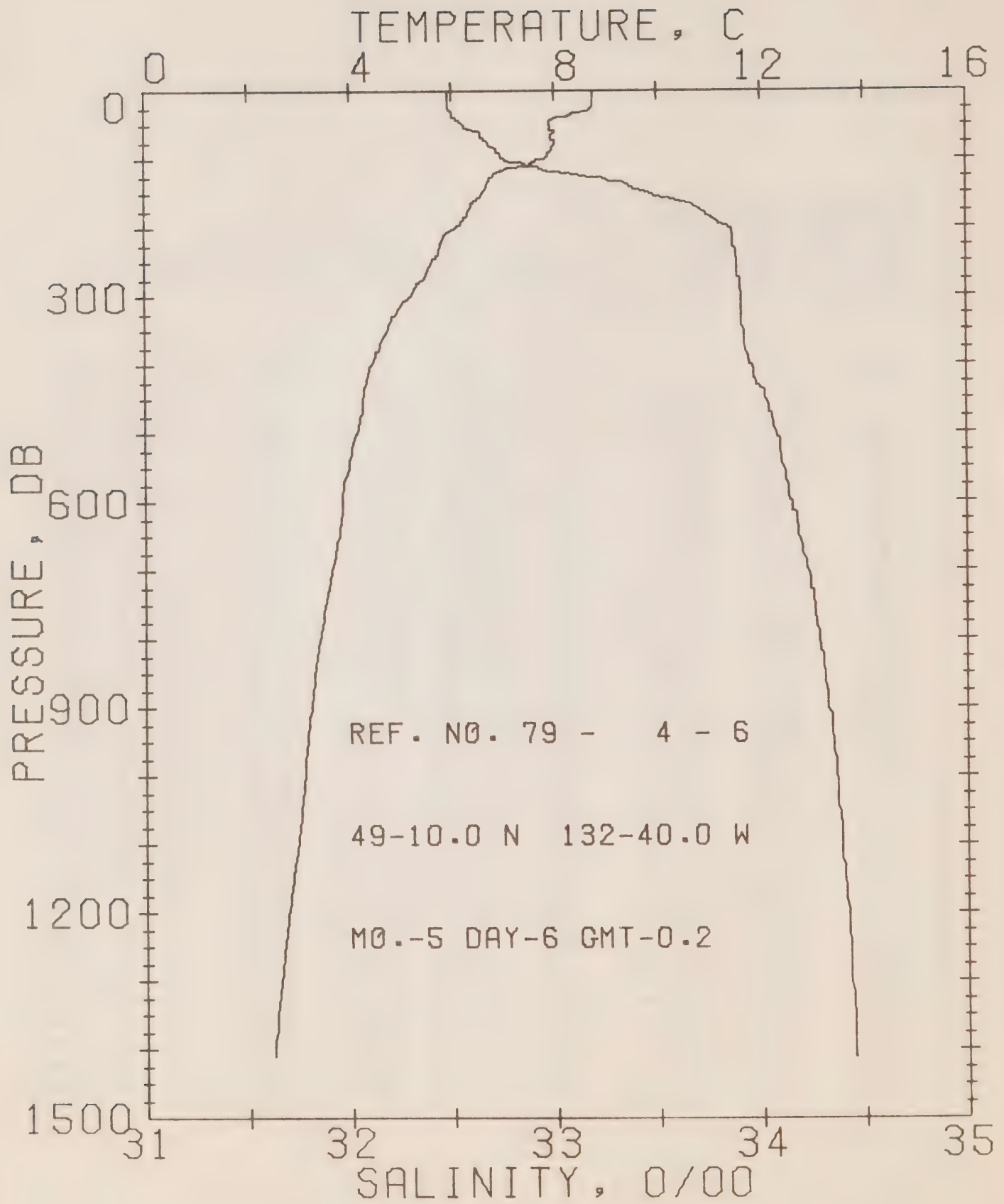
DATE 6/ 5/79

POSITION 49-10.0N, 132-40.0W GMT .2 STATION 7

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.76	32.48	0	25.21	276.9	.00	.00	1483.
10	8.76	32.48	10	25.21	277.1	.28	.01	1483.
20	8.74	32.48	20	25.21	276.9	.55	.06	1483.
30	8.62	32.50	30	25.24	273.9	.83	.13	1483.
40	7.97	32.52	40	25.36	263.3	1.10	.22	1480.
50	7.90	32.55	50	25.39	260.3	1.36	.34	1480.
60	8.01	32.63	60	25.44	255.7	1.62	.49	1481.
70	7.96	32.65	70	25.46	254.0	1.87	.66	1481.
80	7.97	32.68	80	25.48	252.1	2.13	.85	1481.
90	7.88	32.72	89	25.53	248.0	2.38	1.07	1481.
100	7.66	32.76	99	25.59	242.1	2.62	1.30	1480.
110	7.39	32.88	109	25.72	229.3	2.86	1.56	1480.
120	6.89	33.03	119	25.91	212.1	3.08	1.82	1478.
130	6.72	33.25	129	26.10	193.6	3.28	2.07	1478.
140	6.67	33.37	139	26.21	183.8	3.47	2.33	1478.
150	6.58	33.47	149	26.29	175.7	3.65	2.60	1478.
160	6.44	33.61	159	26.42	163.7	3.82	2.87	1478.
170	6.35	33.69	169	26.50	156.5	3.98	3.13	1478.
180	6.30	33.73	179	26.54	152.9	4.13	3.41	1478.
190	6.21	33.79	189	26.59	148.0	4.28	3.69	1477.
200	6.06	33.85	199	26.66	141.5	4.43	3.98	1477.
210	5.84	33.87	209	26.70	137.5	4.57	4.27	1476.
220	5.79	33.87	218	26.71	137.0	4.71	4.57	1476.
230	5.75	33.87	228	26.72	136.4	4.84	4.89	1476.
240	5.70	33.88	238	26.73	135.4	4.98	5.21	1476.
250	5.58	33.89	248	26.75	133.3	5.11	5.55	1476.
260	5.52	33.89	258	26.76	132.7	5.25	5.89	1476.
270	5.48	33.89	268	26.76	132.3	5.38	6.25	1476.
280	5.32	33.90	278	26.79	129.8	5.51	6.62	1475.
290	5.25	33.90	288	26.80	129.1	5.64	7.00	1475.
300	5.17	33.91	298	26.82	127.5	5.77	7.38	1475.



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REFERENCE NO. 79- 4- 6

DATE 6/ 5/79

POSITION 49-10.0N, 132-40.0W

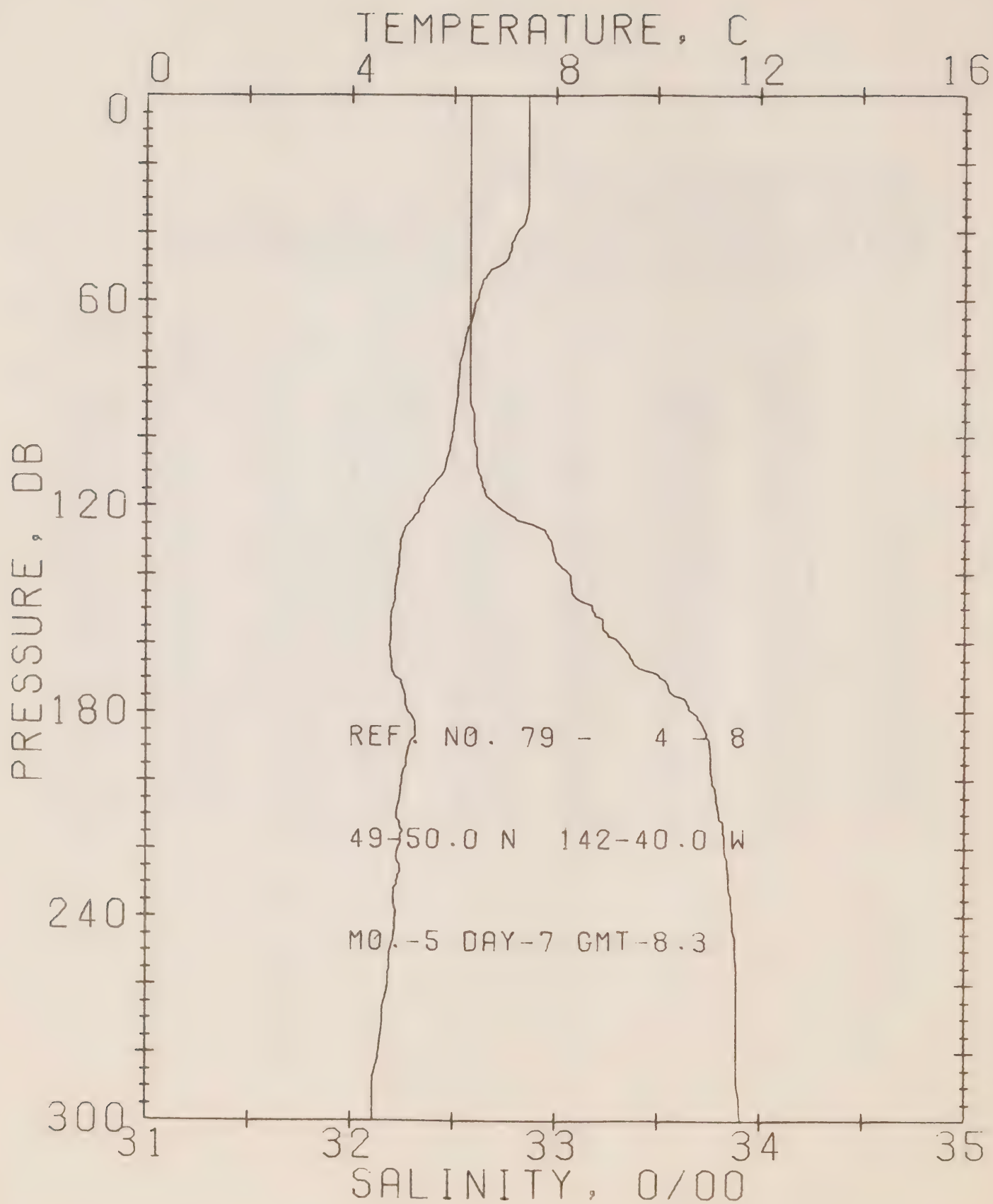
GMT .2

STATION 7

RESULTS OF STP CAST 354 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.76	32.48	0	25.21	276.9	.00	.00	1483.
10	8.76	32.48	10	25.21	277.1	.28	.01	1483.
20	8.74	32.48	20	25.21	276.9	.55	.06	1483.
30	8.62	32.50	30	25.24	273.9	.83	.13	1483.
50	7.90	32.55	50	25.39	260.3	1.36	.34	1480.
75	7.99	32.67	75	25.47	253.0	2.00	.75	1481.
100	7.66	32.76	99	25.59	242.1	2.62	1.30	1480.
125	6.75	33.18	124	26.04	199.2	3.18	1.94	1478.
150	6.58	33.47	149	26.29	175.7	3.65	2.60	1478.
175	6.31	33.71	174	26.52	154.5	4.06	3.27	1477.
200	6.06	33.85	199	26.66	141.5	4.43	3.98	1477.
225	5.76	33.87	223	26.71	136.7	4.77	4.73	1476.
250	5.58	33.89	248	26.75	133.3	5.11	5.55	1476.
300	5.17	33.91	298	26.82	127.5	5.77	7.38	1475.
400	4.40	33.95	397	26.94	116.5	6.99	11.73	1474.
500	4.11	34.07	496	27.06	105.5	8.09	16.80	1474.
600	3.85	34.15	595	27.15	97.6	9.11	22.47	1475.
800	3.40	34.28	793	27.30	84.5	10.92	35.37	1476.
1000	3.07	34.36	990	27.39	76.1	12.52	49.97	1478.
1200	2.77	34.42	1188	27.47	69.7	13.98	66.36	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 8

DATE 7/ 5/79

POSITION 49-50.0N, 142-40.0W

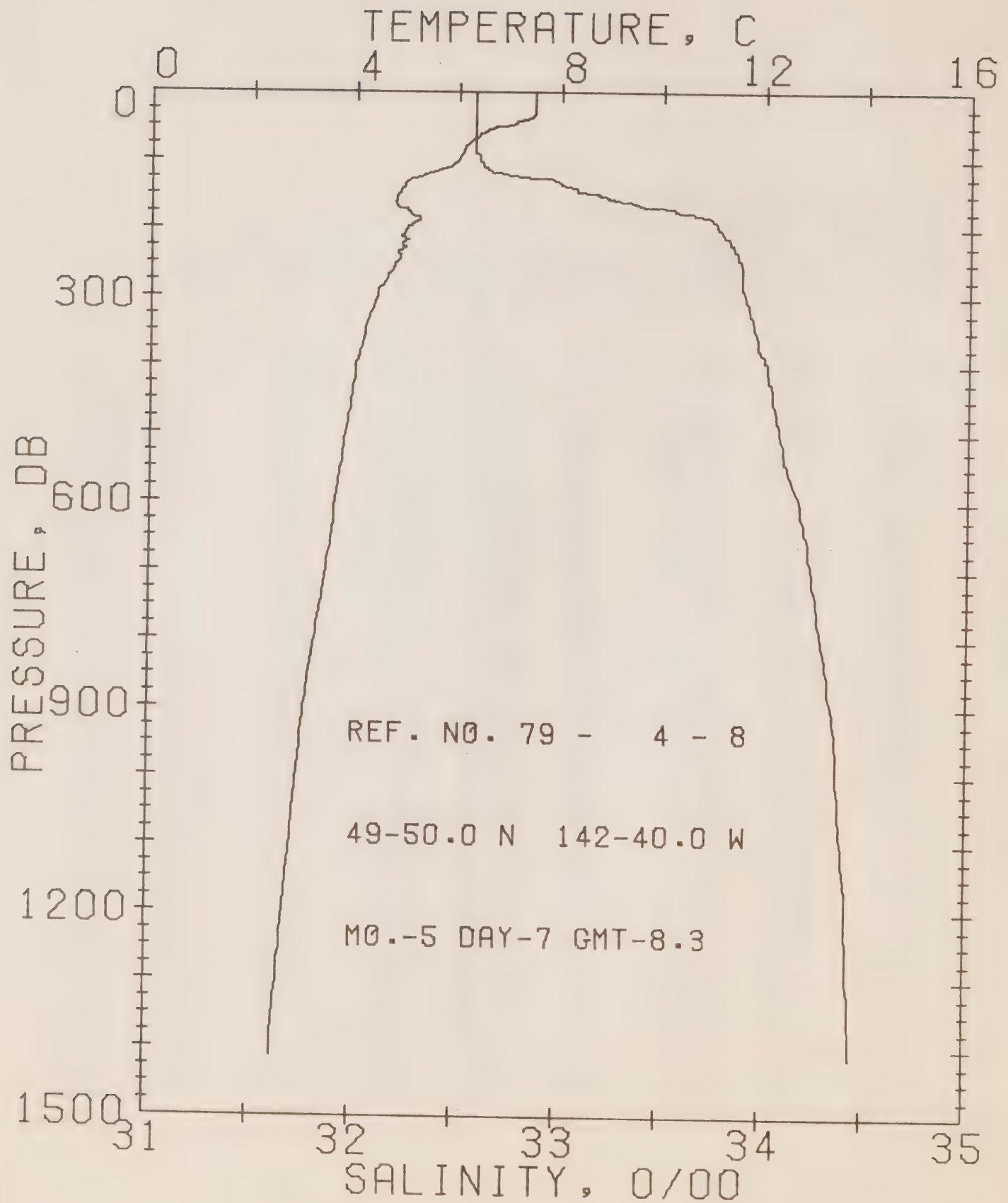
GMT 8.3

STATION 12

RESULTS OF STP CAST 195 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.46	32.58	0	25.48	251.4	.00	.00	1478.
10	7.47	32.58	10	25.47	251.7	.25	.01	1478.
20	7.46	32.58	20	25.48	251.7	.50	.05	1478.
30	7.46	32.58	30	25.48	251.8	.75	.12	1478.
40	7.23	32.58	40	25.51	248.9	1.01	.21	1477.
50	6.85	32.58	50	25.56	244.2	1.25	.32	1476.
60	6.45	32.58	60	25.61	239.3	1.49	.45	1475.
70	6.24	32.58	70	25.64	236.9	1.73	.61	1474.
80	6.12	32.58	80	25.65	235.5	1.97	.79	1474.
90	6.05	32.58	89	25.66	234.8	2.20	1.00	1474.
100	5.97	32.60	99	25.69	232.4	2.44	1.22	1473.
110	5.82	32.62	109	25.72	229.3	2.67	1.47	1473.
120	5.34	32.71	119	25.85	217.2	2.89	1.73	1471.
130	4.97	32.96	129	26.10	193.0	3.10	1.99	1470.
140	4.90	33.07	139	26.18	185.6	3.29	2.25	1470.
150	4.81	33.18	149	26.28	176.5	3.47	2.52	1470.
160	4.76	33.32	159	26.39	166.0	3.64	2.79	1470.
170	4.89	33.51	169	26.53	152.9	3.80	3.06	1471.
180	5.11	33.67	179	26.63	143.5	3.95	3.33	1473.
190	5.13	33.75	189	26.70	137.6	4.09	3.59	1473.
200	4.99	33.77	199	26.73	134.8	4.23	3.86	1473.
210	4.89	33.80	209	26.76	131.6	4.36	4.14	1472.
220	4.91	33.83	218	26.78	129.7	4.49	4.43	1473.
230	4.89	33.85	228	26.80	128.1	4.62	4.72	1473.
240	4.87	33.87	238	26.82	126.4	4.75	5.03	1473.
250	4.76	33.88	248	26.84	124.6	4.87	5.34	1473.
260	4.71	33.89	258	26.85	123.4	5.00	5.66	1473.
270	4.61	33.89	268	26.86	122.4	5.12	6.00	1472.
280	4.55	33.89	278	26.87	121.8	5.24	6.34	1472.
290	4.42	33.89	288	26.88	120.3	5.36	6.69	1472.
300	4.42	33.91	298	26.90	119.1	5.48	7.05	1472.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 8

DATE 7/ 5/79

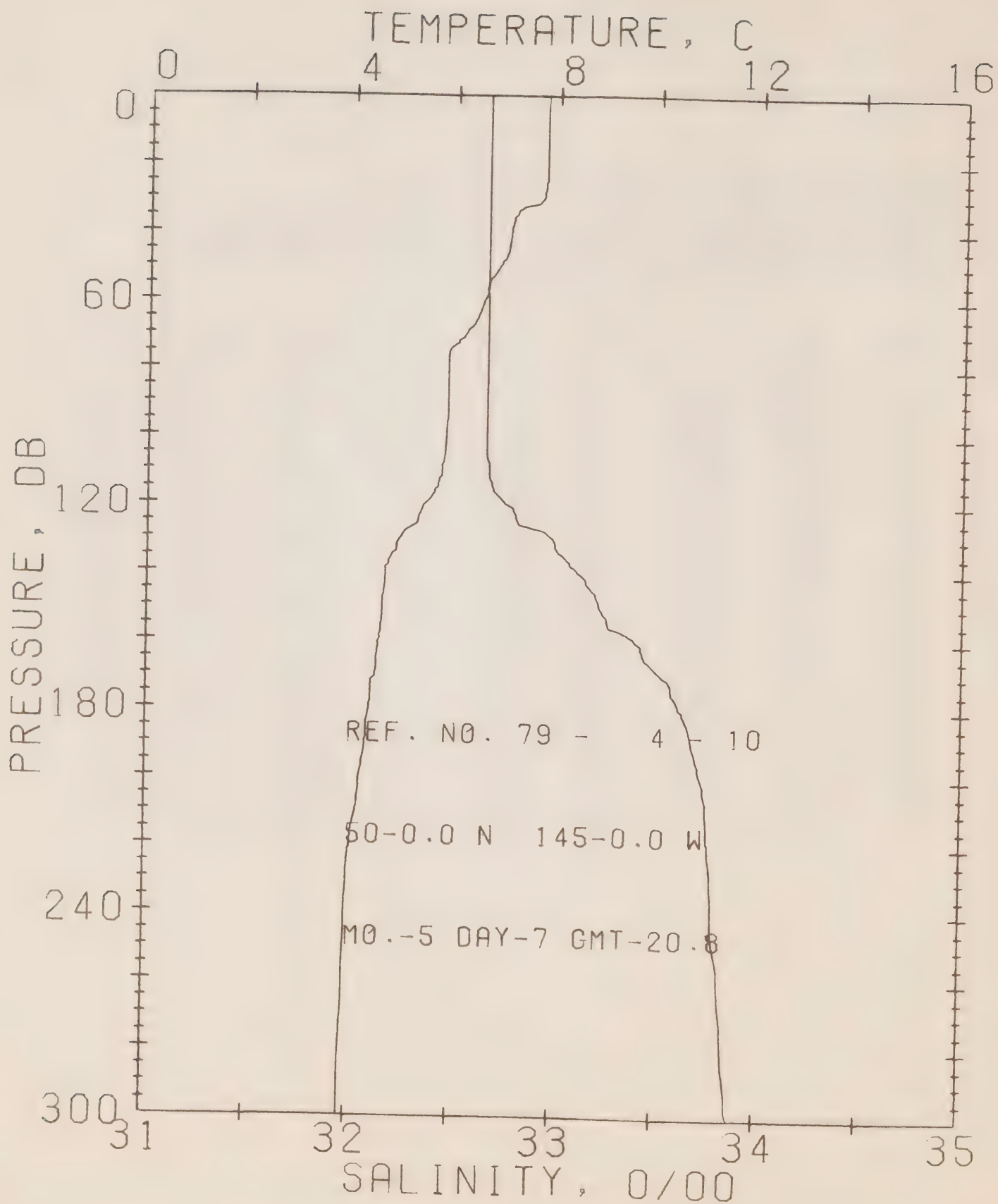
POSITION 49-50.0N, 142-40.0W GMT 8.3

STATION 12

RESULTS OF STP CAST 334 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.46	32.58	0	25.48	251.4	.00	.00	1478.
10	7.47	32.58	10	25.47	251.7	.25	.01	1478.
20	7.46	32.58	20	25.48	251.7	.50	.05	1478.
30	7.46	32.58	30	25.48	251.8	.75	.12	1478.
50	6.85	32.58	50	25.56	244.2	1.25	.32	1476.
75	6.18	32.58	75	25.64	236.2	1.85	.70	1474.
100	5.97	32.60	99	25.69	232.4	2.44	1.22	1473.
125	5.13	32.88	124	26.01	202.2	3.00	1.86	1471.
150	4.81	33.18	149	26.28	176.5	3.47	2.52	1470.
175	5.07	33.58	174	26.57	149.7	3.88	3.20	1472.
200	4.99	33.77	199	26.73	134.8	4.23	3.86	1473.
225	4.95	33.84	223	26.78	129.4	4.55	4.58	1473.
250	4.76	33.88	248	26.84	124.6	4.87	5.34	1473.
300	4.42	33.91	298	26.90	119.1	5.48	7.05	1472.
400	4.00	34.01	397	27.02	108.0	6.62	11.10	1472.
500	3.81	34.07	496	27.09	102.2	7.67	15.92	1473.
600	3.63	34.17	595	27.19	93.4	8.65	21.42	1474.
800	3.24	34.29	793	27.32	82.3	10.41	33.92	1476.
1000	2.92	34.37	990	27.41	73.9	11.95	48.06	1478.
1200	2.68	34.42	1188	27.47	68.8	13.38	64.03	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 10

DATE 7/ 5/79

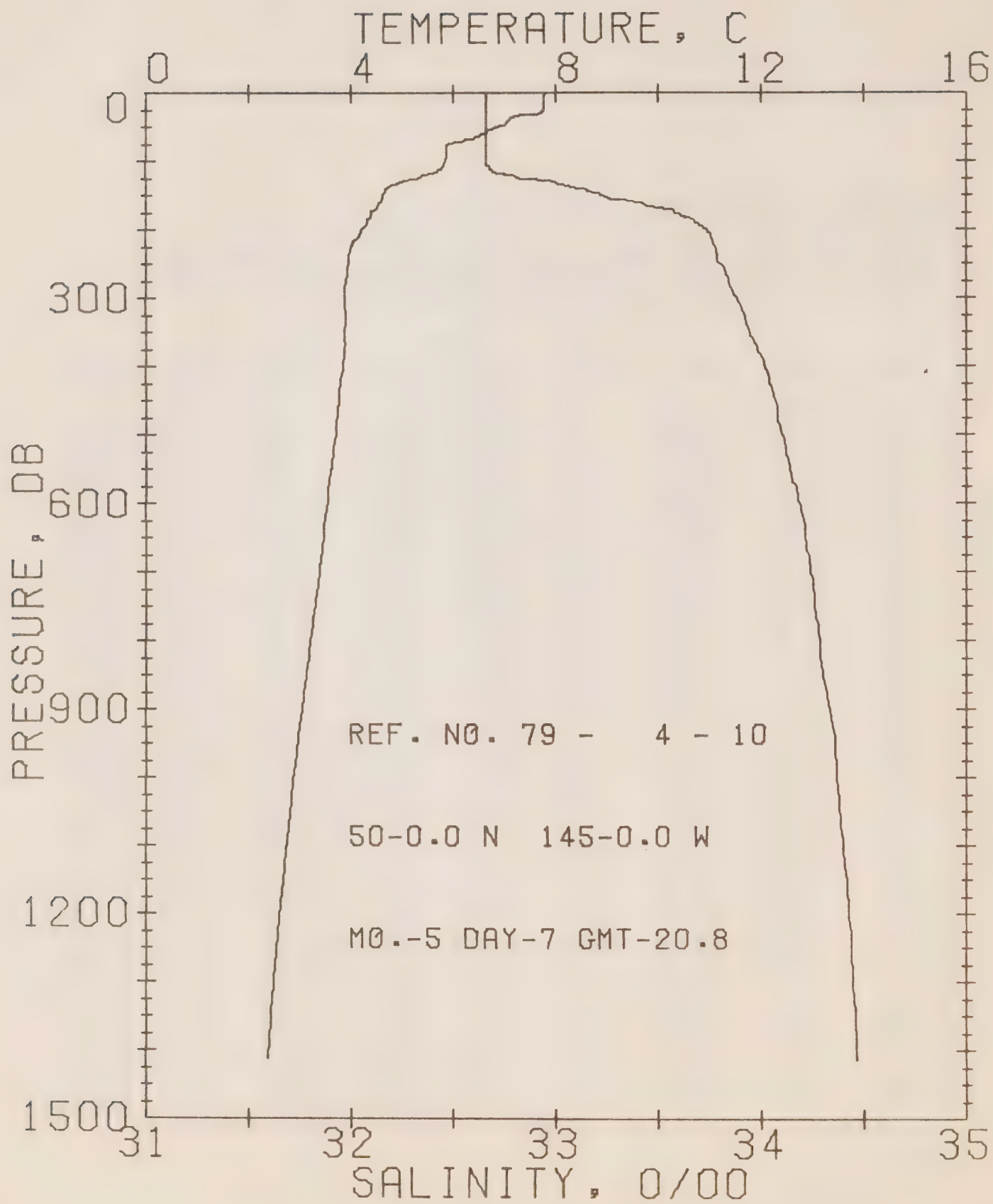
POSITION 50- .0N, 145- .0W GMT 20.8

STATION P

RESULTS OF STP CAST 155 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.78	32.66	0	25.49	249.7	.00	.00	1479.
10	7.75	32.66	10	25.50	249.5	.25	.01	1479.
20	7.76	32.66	20	25.50	249.8	.50	.05	1479.
30	7.70	32.66	30	25.50	249.1	.75	.11	1479.
40	7.07	32.66	40	25.59	240.9	.99	.20	1477.
50	6.87	32.66	50	25.62	238.5	1.23	.31	1476.
60	6.56	32.66	60	25.66	234.8	1.47	.44	1475.
70	6.19	32.66	70	25.71	230.4	1.70	.60	1474.
80	5.86	32.66	79	25.75	226.5	1.93	.77	1473.
90	5.88	32.66	89	25.74	226.8	2.16	.97	1473.
100	5.83	32.66	99	25.75	226.4	2.38	1.19	1473.
110	5.76	32.67	109	25.77	224.9	2.61	1.43	1473.
120	5.44	32.75	119	25.87	215.4	2.83	1.69	1472.
130	4.96	32.99	129	26.11	192.2	3.04	1.95	1470.
140	4.66	33.11	139	26.24	180.1	3.22	2.21	1469.
150	4.61	33.22	149	26.33	171.4	3.40	2.47	1469.
160	4.55	33.40	159	26.48	157.3	3.56	2.73	1470.
170	4.49	33.53	169	26.59	147.1	3.72	2.99	1470.
180	4.37	33.63	179	26.68	138.4	3.86	3.24	1470.
190	4.30	33.68	189	26.73	134.0	3.99	3.49	1469.
200	4.21	33.72	199	26.77	129.7	4.13	3.76	1469.
210	4.12	33.75	209	26.80	127.1	4.25	4.02	1469.
220	4.03	33.77	218	26.83	124.7	4.38	4.30	1469.
230	3.98	33.78	228	26.84	123.6	4.50	4.59	1469.
240	3.95	33.79	238	26.85	122.6	4.63	4.88	1469.
250	3.94	33.80	248	26.86	121.6	4.75	5.19	1469.
260	3.92	33.82	258	26.88	120.0	4.87	5.50	1469.
270	3.90	33.84	268	26.89	118.9	4.99	5.82	1469.
280	3.88	33.85	278	26.90	118.1	5.11	6.15	1469.
290	3.88	33.86	288	26.92	117.0	5.23	6.50	1470.
300	3.88	33.88	298	26.93	115.6	5.34	6.85	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 10

DATE 7/ 5/79

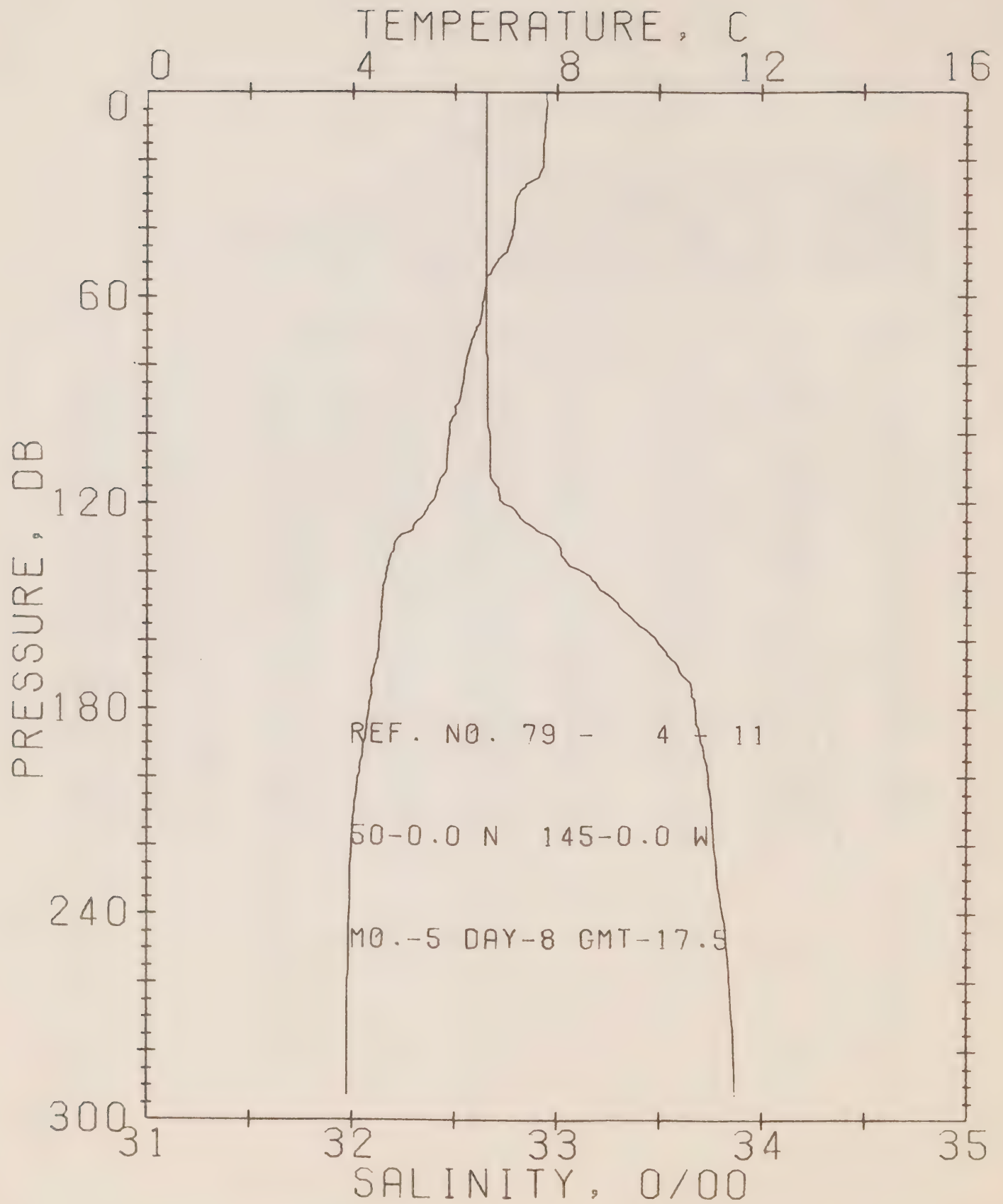
POSITION 50- .0N, 145- .0W GMT 20.8

STATION P

RESULTS OF STP CAST 271 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.78	32.66	0	25.49	249.7	.00	.00	1479.
10	7.75	32.66	10	25.50	249.5	.25	.01	1479.
20	7.76	32.66	20	25.50	249.8	.50	.05	1479.
30	7.70	32.66	30	25.50	249.1	.75	.11	1479.
50	6.87	32.66	50	25.62	238.5	1.23	.31	1476.
75	5.88	32.66	75	25.74	226.7	1.82	.68	1473.
100	5.83	32.66	99	25.75	226.4	2.38	1.19	1473.
125	5.30	32.82	124	25.94	208.9	2.94	1.82	1471.
150	4.61	33.22	149	26.33	171.4	3.40	2.47	1469.
175	4.40	33.58	174	26.64	142.4	3.79	3.11	1469.
200	4.21	33.72	199	26.77	129.7	4.13	3.76	1469.
225	4.00	33.77	223	26.84	124.1	4.44	4.44	1469.
250	3.94	33.80	248	26.86	121.6	4.75	5.19	1469.
300	3.88	33.88	298	26.93	115.6	5.34	6.85	1470.
400	3.84	34.01	397	27.04	106.0	6.45	10.79	1471.
500	3.70	34.10	496	27.12	99.0	7.47	15.46	1473.
600	3.54	34.18	595	27.21	91.6	8.42	20.80	1474.
800	3.20	34.29	793	27.32	81.7	10.15	33.12	1476.
1000	2.86	34.37	990	27.42	73.3	11.70	47.29	1478.
1200	2.61	34.43	1188	27.49	67.2	13.11	63.01	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 11

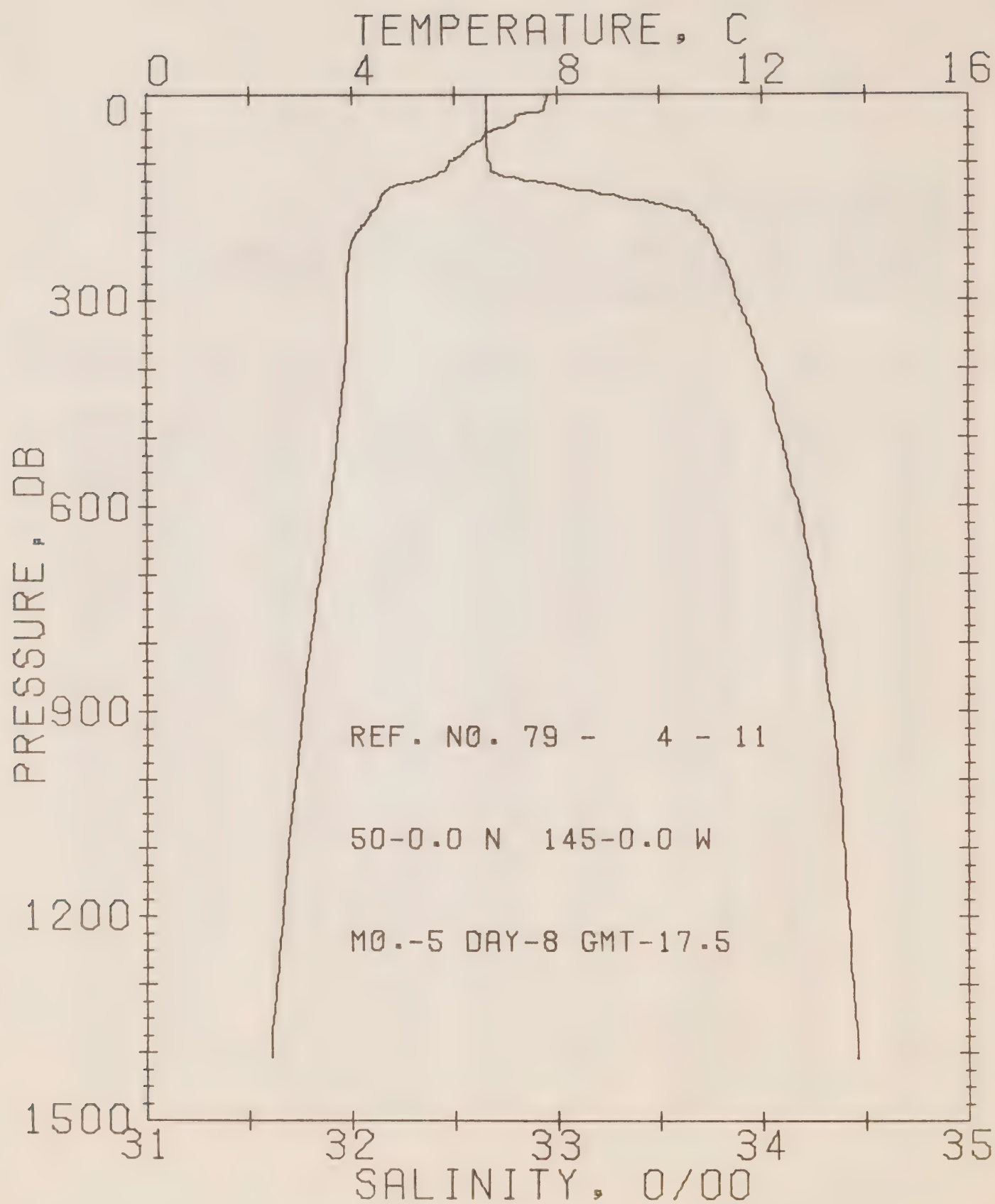
DATE 8/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 154 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.80	32.65	0	25.48	250.7	.00	.00	1479.
10	7.77	32.65	10	25.49	250.5	.25	.01	1479.
20	7.73	32.65	20	25.49	250.1	.50	.05	1479.
30	7.25	32.65	30	25.56	243.8	.75	.11	1477.
40	7.14	32.65	40	25.57	242.5	.99	.20	1477.
50	6.81	32.65	50	25.62	238.5	1.23	.31	1476.
60	6.57	32.65	60	25.65	235.5	1.47	.44	1475.
70	6.39	32.65	70	25.67	233.5	1.70	.60	1475.
80	6.20	32.66	79	25.71	230.5	1.94	.78	1474.
90	6.09	32.66	89	25.72	229.3	2.17	.98	1474.
100	5.89	32.67	99	25.75	226.3	2.39	1.20	1473.
110	5.83	32.67	109	25.76	225.7	2.62	1.44	1473.
120	5.52	32.74	119	25.85	217.0	2.84	1.70	1472.
130	4.89	32.98	129	26.11	192.2	3.05	1.96	1470.
140	4.65	33.13	139	26.26	178.5	3.23	2.22	1469.
150	4.57	33.31	149	26.41	164.2	3.40	2.47	1469.
160	4.51	33.49	159	26.56	150.2	3.56	2.72	1470.
170	4.40	33.61	169	26.66	140.1	3.71	2.96	1469.
180	4.31	33.68	179	26.73	134.0	3.84	3.20	1469.
190	4.22	33.70	189	26.76	131.3	3.98	3.45	1469.
200	4.11	33.74	199	26.80	127.6	4.10	3.71	1469.
210	4.02	33.76	209	26.82	125.3	4.23	3.98	1469.
220	3.98	33.77	218	26.83	124.2	4.36	4.25	1469.
230	3.96	33.78	228	26.85	123.0	4.48	4.53	1469.
240	3.94	33.81	238	26.87	120.9	4.60	4.83	1469.
250	3.93	33.83	248	26.89	119.4	4.72	5.12	1469.
260	3.90	33.84	258	26.90	118.4	4.84	5.43	1469.
270	3.89	33.85	268	26.91	117.4	4.96	5.75	1469.
280	3.90	33.86	278	26.92	116.9	5.08	6.08	1469.
290	3.89	33.87	288	26.92	116.4	5.19	6.42	1470.
300	3.89	33.89	298	26.93	115.3	5.31	6.77	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 11

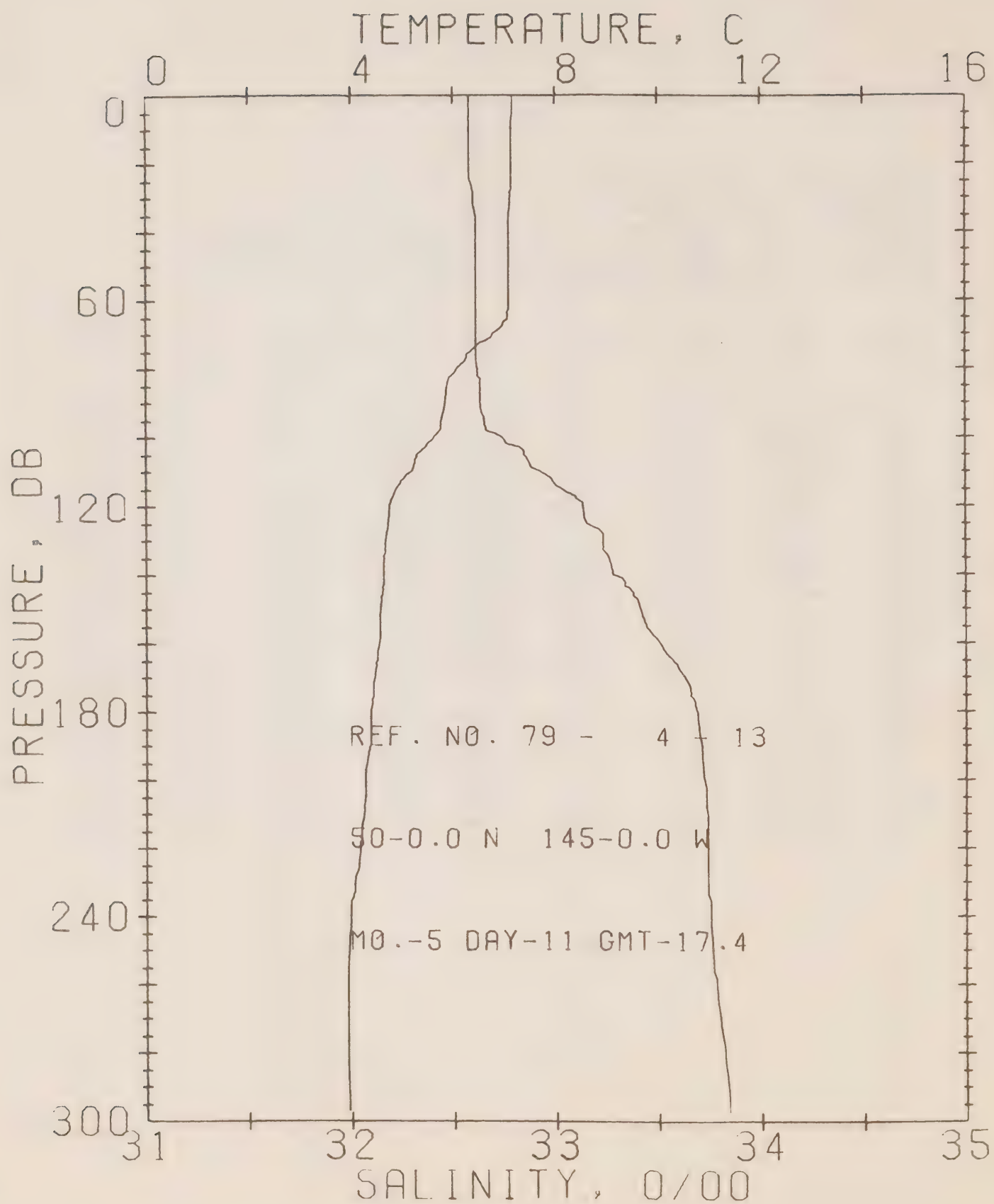
DATE 8/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 261 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.80	32.65	0	25.48	250.7	.00	.00	1479.
10	7.77	32.65	10	25.49	250.5	.25	.01	1479.
20	7.73	32.65	20	25.49	250.1	.50	.05	1479.
30	7.25	32.65	30	25.56	243.8	.75	.11	1477.
50	6.81	32.65	50	25.62	238.5	1.23	.31	1476.
75	6.29	32.65	75	25.69	232.3	1.82	.69	1474.
100	5.89	32.67	99	25.75	226.3	2.39	1.20	1473.
125	5.26	32.84	124	25.96	206.6	2.95	1.83	1471.
150	4.57	33.31	149	26.41	164.2	3.40	2.47	1469.
175	4.36	33.66	174	26.71	136.0	3.77	3.08	1469.
200	4.11	33.74	199	26.80	127.6	4.10	3.71	1469.
225	3.96	33.78	223	26.84	123.5	4.42	4.39	1469.
250	3.93	33.83	248	26.89	119.4	4.72	5.12	1469.
300	3.89	33.89	298	26.93	115.3	5.31	6.77	1470.
400	3.85	34.00	397	27.03	107.1	6.42	10.73	1471.
500	3.71	34.09	496	27.12	99.6	7.46	15.47	1473.
600	3.54	34.17	595	27.20	92.4	8.42	20.87	1474.
800	3.18	34.29	793	27.32	81.5	10.16	33.21	1475.
1000	2.89	34.37	990	27.42	73.3	11.70	47.35	1478.
1200	2.64	34.42	1188	27.48	68.3	13.11	63.19	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 13

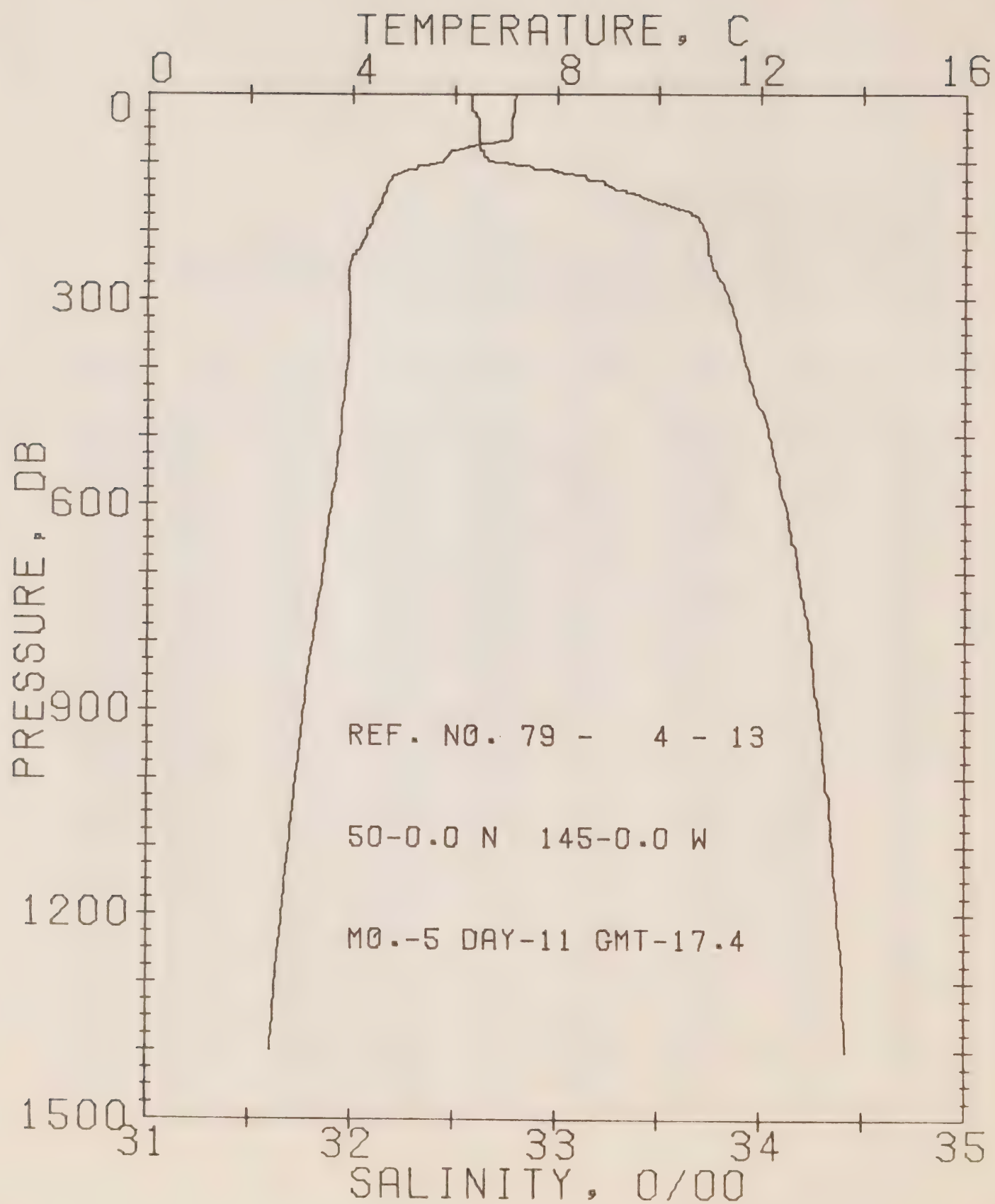
DATE 11/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 150 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.16	32.58	0	25.52	247.5	.00	.00	1477.
10	7.14	32.58	10	25.52	247.4	.25	.01	1477.
20	7.14	32.58	20	25.52	247.5	.49	.05	1477.
30	7.13	32.60	30	25.54	246.0	.74	.11	1477.
40	7.09	32.61	40	25.55	244.9	.99	.20	1477.
50	7.08	32.61	50	25.55	244.9	1.23	.31	1477.
60	7.08	32.61	60	25.55	245.0	1.48	.45	1477.
70	6.77	32.61	70	25.59	241.2	1.72	.61	1476.
80	6.07	32.62	79	25.69	232.0	1.96	.79	1474.
90	5.85	32.63	89	25.72	228.7	2.19	.99	1473.
100	5.62	32.74	99	25.84	217.9	2.41	1.21	1472.
110	5.20	32.93	109	26.04	199.1	2.62	1.43	1471.
120	4.75	33.13	119	26.25	179.3	2.81	1.65	1469.
130	4.68	33.23	129	26.33	171.2	2.99	1.88	1469.
140	4.64	33.28	139	26.38	167.1	3.15	2.11	1470.
150	4.57	33.42	149	26.49	156.0	3.31	2.35	1470.
160	4.54	33.51	159	26.57	149.0	3.47	2.59	1470.
170	4.46	33.63	169	26.67	139.3	3.61	2.83	1470.
180	4.37	33.69	179	26.73	133.9	3.75	3.07	1470.
190	4.36	33.71	189	26.75	132.4	3.88	3.32	1470.
200	4.27	33.72	199	26.77	130.6	4.01	3.59	1470.
210	4.24	33.74	209	26.78	129.1	4.14	3.86	1470.
220	4.16	33.74	218	26.79	128.3	4.27	4.14	1469.
230	4.05	33.74	228	26.80	127.3	4.40	4.43	1469.
240	3.97	33.75	238	26.82	125.8	4.53	4.74	1469.
250	3.94	33.76	248	26.83	124.7	4.65	5.05	1469.
260	3.93	33.78	258	26.85	123.1	4.77	5.37	1469.
270	3.93	33.80	268	26.86	121.9	4.90	5.70	1469.
280	3.93	33.82	278	26.88	120.5	5.02	6.04	1470.
290	3.94	33.84	288	26.89	119.5	5.14	6.39	1470.
300	3.94	33.85	298	26.90	118.7	5.26	6.75	1470.



OFFSHORE OCEANOGRAPH, GROUP

REFERENCE NO. 79- 4- 13

DATE 11/ 5/79

POSITION 50- .0N, 145- .0W

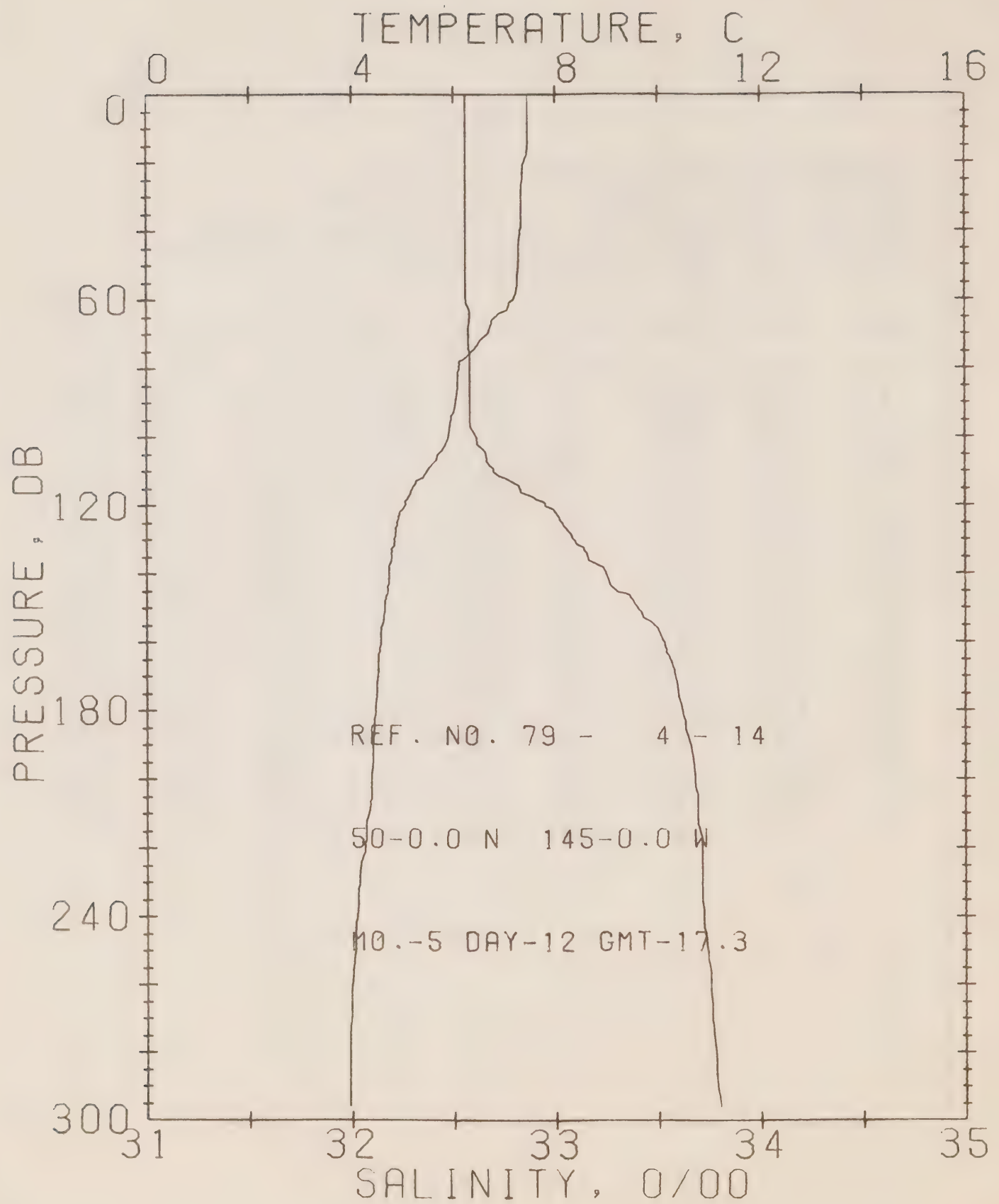
GMT 17.4

STATION P

RESULTS OF STP CAST 262 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.16	32.58	0	25.52	247.5	.00	.00	1477.
10	7.14	32.58	10	25.52	247.4	.25	.01	1477.
20	7.14	32.58	20	25.52	247.5	.49	.05	1477.
30	7.13	32.60	30	25.54	246.0	.74	.11	1477.
50	7.08	32.61	50	25.55	244.9	1.23	.31	1477.
75	6.36	32.61	75	25.65	236.1	1.84	.70	1475.
100	5.62	32.74	99	25.84	217.9	2.41	1.21	1472.
125	4.73	33.15	124	26.26	177.7	2.90	1.76	1469.
150	4.57	33.42	149	26.49	156.0	3.31	2.35	1470.
175	4.43	33.66	174	26.70	136.7	3.68	2.95	1470.
200	4.27	33.72	199	26.77	130.6	4.01	3.59	1470.
225	4.12	33.74	223	26.80	128.0	4.34	4.29	1469.
250	3.94	33.76	248	26.83	124.7	4.65	5.05	1469.
300	3.94	33.85	298	26.90	118.7	5.26	6.75	1470.
400	3.90	33.93	397	26.97	112.5	6.41	10.87	1472.
500	3.77	34.04	496	27.07	104.1	7.49	15.82	1473.
600	3.59	34.12	595	27.15	96.9	8.50	21.45	1474.
800	3.23	34.25	793	27.29	85.2	10.32	34.41	1476.
1000	2.92	34.32	990	27.37	77.6	11.95	49.29	1478.
1200	2.65	34.38	1188	27.44	71.4	13.43	65.88	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 14

DATE 12/ 5/79

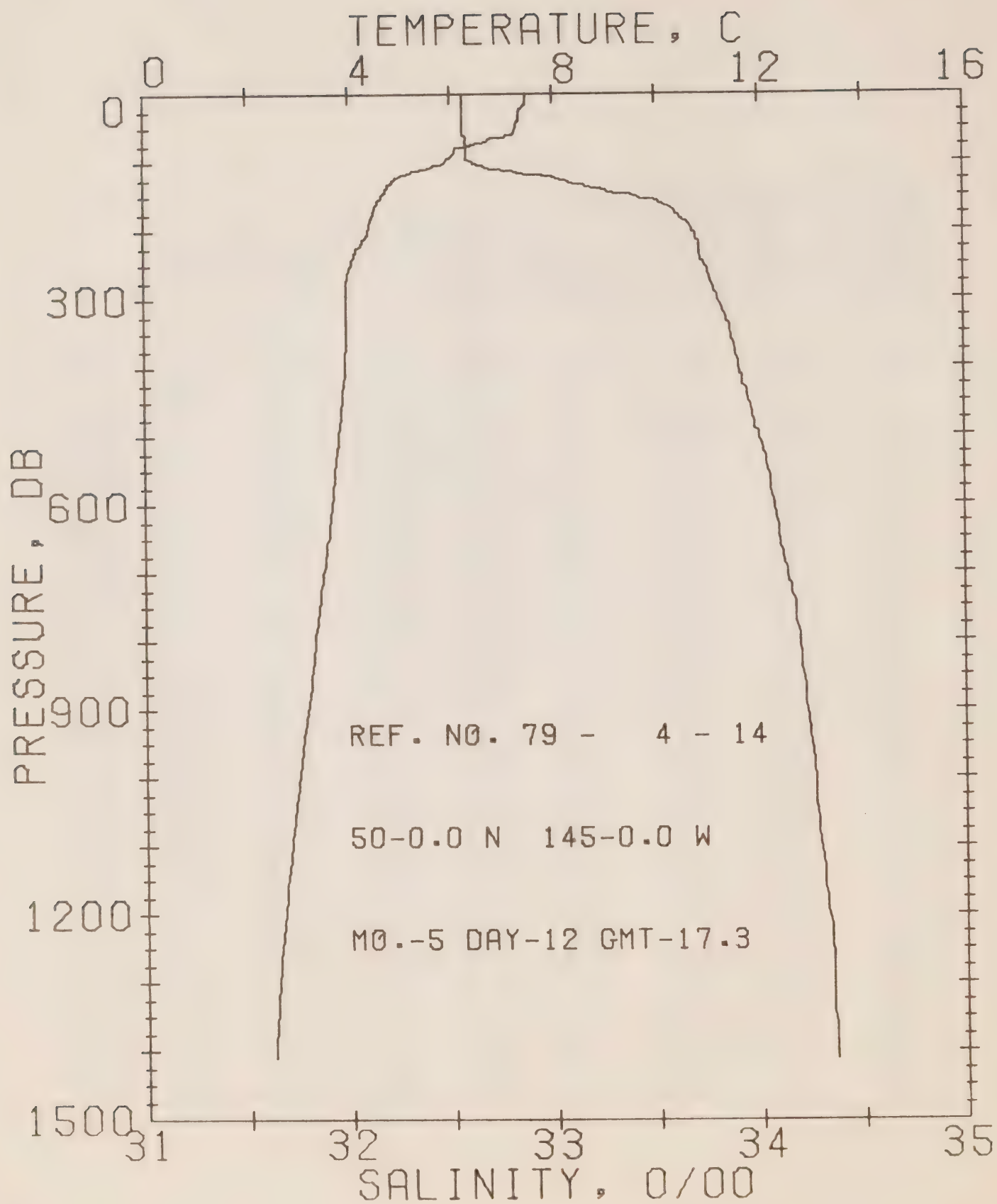
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.46	32.56	0	25.46	252.9	.00	.00	1478.
10	7.46	32.56	10	25.46	253.1	.25	.01	1478.
20	7.39	32.56	20	25.47	252.2	.51	.05	1478.
30	7.34	32.56	30	25.48	251.7	.76	.12	1478.
40	7.30	32.56	40	25.48	251.3	1.01	.21	1478.
50	7.27	32.56	50	25.49	251.0	1.26	.32	1478.
60	7.17	32.56	60	25.50	249.9	1.51	.46	1477.
70	6.66	32.57	70	25.58	242.8	1.76	.62	1476.
80	6.10	32.58	80	25.65	235.3	2.00	.81	1474.
90	6.04	32.58	89	25.66	234.7	2.23	1.01	1474.
100	5.89	32.61	99	25.70	230.8	2.46	1.24	1473.
110	5.46	32.69	109	25.82	220.0	2.69	1.48	1472.
120	5.04	32.95	119	26.07	195.9	2.90	1.72	1470.
130	4.84	33.09	129	26.20	183.4	3.08	1.96	1470.
140	4.71	33.24	139	26.34	170.5	3.26	2.20	1470.
150	4.63	33.40	149	26.48	157.8	3.43	2.45	1470.
160	4.56	33.53	159	26.58	147.7	3.58	2.69	1470.
170	4.50	33.58	169	26.63	143.1	3.72	2.93	1470.
180	4.46	33.62	179	26.66	140.4	3.87	3.18	1470.
190	4.40	33.66	189	26.70	136.6	4.00	3.45	1470.
200	4.38	33.68	199	26.72	134.9	4.14	3.71	1470.
210	4.33	33.69	209	26.73	133.8	4.27	4.00	1470.
220	4.24	33.71	218	26.76	131.4	4.41	4.29	1470.
230	4.14	33.71	228	26.77	130.5	4.54	4.59	1469.
240	4.09	33.72	238	26.78	129.3	4.67	4.90	1469.
250	4.04	33.74	248	26.80	127.3	4.80	5.22	1469.
260	3.98	33.75	258	26.82	126.1	4.92	5.55	1469.
270	3.97	33.76	268	26.83	125.3	5.05	5.89	1469.
280	3.96	33.78	278	26.84	124.0	5.17	6.23	1470.
290	3.96	33.79	288	26.85	123.3	5.30	6.59	1470.
300	3.96	33.80	298	26.86	122.4	5.42	6.96	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 14

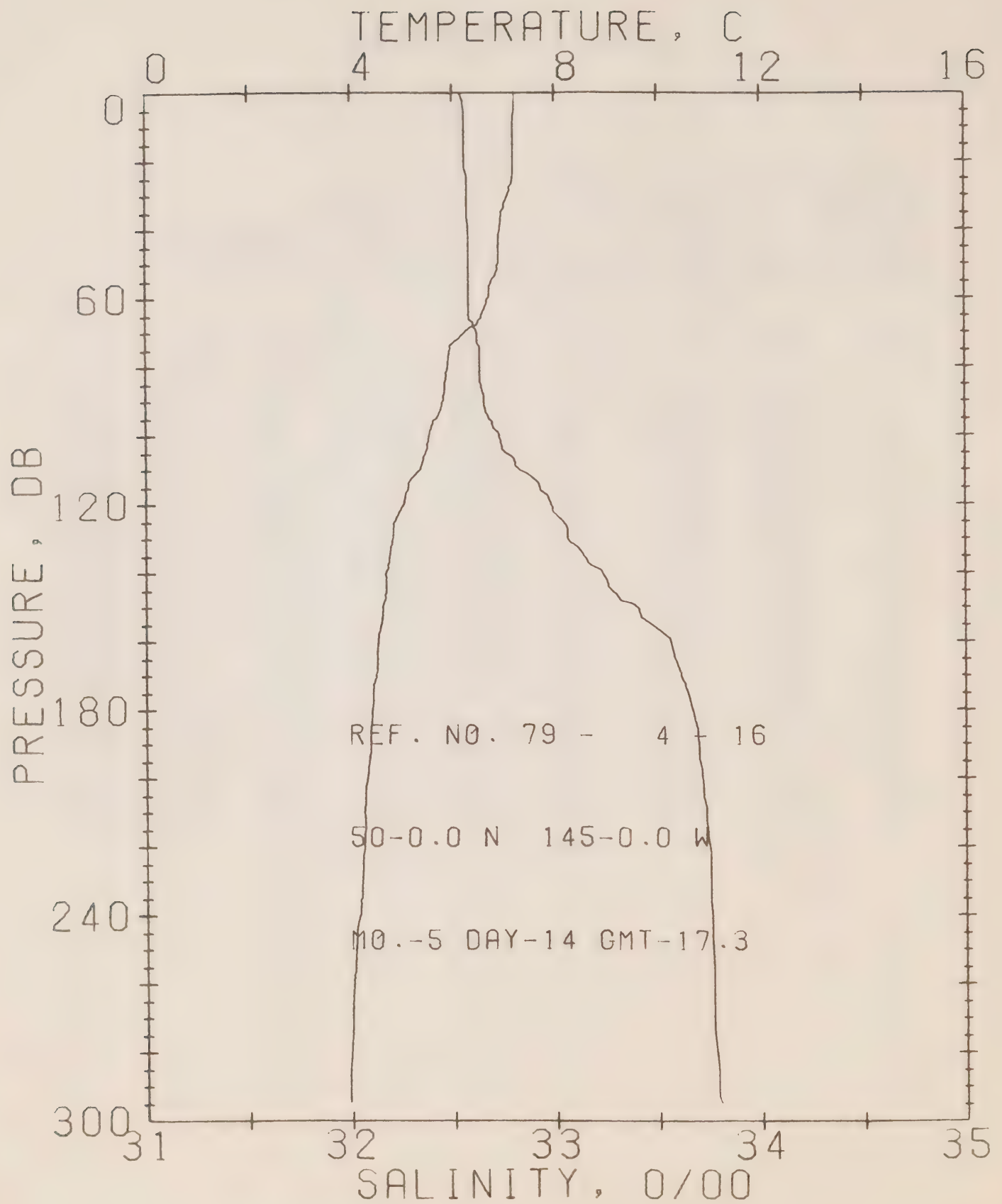
DATE 12/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 288 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.46	32.56	0	25.46	252.9	.00	.00	1478.
10	7.46	32.56	10	25.46	253.1	.25	.01	1478.
20	7.39	32.56	20	25.47	252.2	.51	.05	1478.
30	7.34	32.56	30	25.48	251.7	.76	.12	1478.
50	7.27	32.56	50	25.49	251.0	1.26	.32	1478.
75	6.36	32.58	75	25.62	238.4	1.88	.71	1475.
100	5.89	32.61	99	25.70	230.8	2.46	1.24	1473.
125	4.89	33.03	124	26.15	188.4	2.99	1.84	1470.
150	4.63	33.40	149	26.48	157.8	3.43	2.45	1470.
175	4.48	33.60	174	26.65	141.9	3.80	3.06	1470.
200	4.38	33.68	199	26.72	134.9	4.14	3.71	1470.
225	4.15	33.71	223	26.77	130.5	4.47	4.43	1469.
250	4.04	33.74	248	26.80	127.3	4.80	5.22	1469.
300	3.96	33.80	298	26.86	122.4	5.42	6.96	1470.
400	3.93	33.90	397	26.94	115.5	6.60	11.17	1472.
500	3.79	34.00	496	27.04	107.3	7.71	16.27	1473.
600	3.65	34.07	595	27.10	101.4	8.75	22.10	1474.
800	3.31	34.19	793	27.23	90.3	10.67	35.73	1476.
1000	2.97	34.27	990	27.33	82.1	12.40	51.54	1478.
1200	2.69	34.33	1188	27.40	75.8	13.98	69.26	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 16

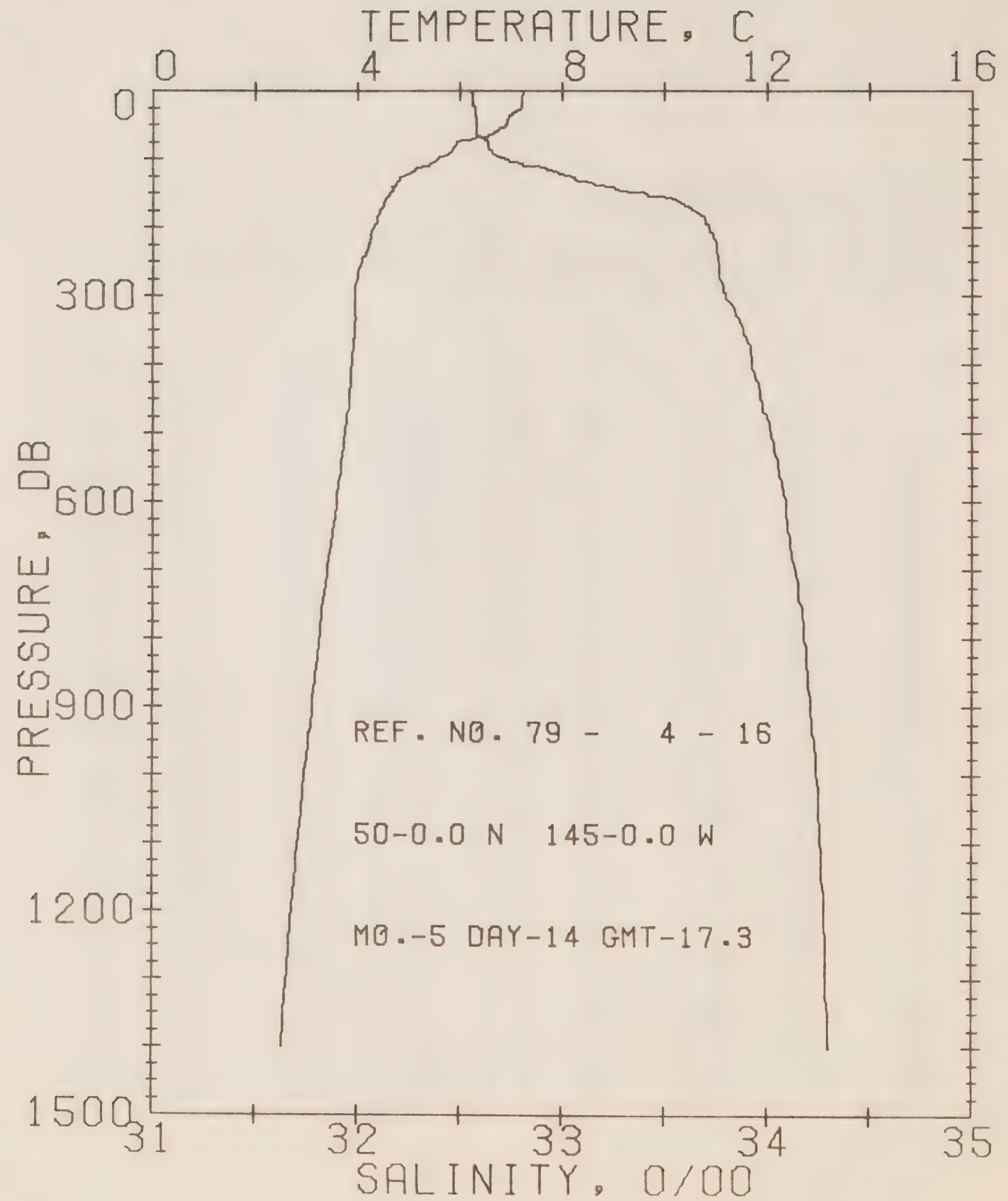
DATE 14/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 155 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.23	32.54	0	25.48	251.4	.00	.00	1477.
10	7.21	32.56	10	25.49	249.8	.25	.01	1477.
20	7.20	32.56	20	25.50	249.8	.50	.05	1477.
30	7.09	32.57	30	25.52	247.7	.75	.11	1477.
40	6.94	32.58	40	25.55	245.3	1.00	.20	1476.
50	6.90	32.58	50	25.55	244.8	1.24	.31	1476.
60	6.71	32.58	60	25.58	242.5	1.48	.45	1476.
70	6.23	32.62	70	25.67	233.8	1.72	.61	1474.
80	5.90	32.63	79	25.72	229.2	1.95	.79	1473.
90	5.81	32.65	89	25.75	226.8	2.18	.98	1473.
100	5.54	32.72	99	25.84	218.1	2.41	1.20	1472.
110	5.36	32.83	109	25.94	208.4	2.62	1.43	1471.
120	5.03	32.98	119	26.10	193.6	2.82	1.66	1470.
130	4.82	33.06	129	26.18	185.4	3.01	1.90	1470.
140	4.69	33.23	139	26.33	171.4	3.19	2.15	1470.
150	4.61	33.41	149	26.48	157.1	3.35	2.39	1470.
160	4.54	33.56	159	26.61	144.9	3.50	2.63	1470.
170	4.49	33.61	169	26.65	141.1	3.65	2.87	1470.
180	4.41	33.67	179	26.71	136.1	3.79	3.12	1470.
190	4.36	33.70	189	26.74	133.4	3.92	3.37	1470.
200	4.30	33.71	199	26.75	131.7	4.05	3.64	1470.
210	4.25	33.73	209	26.77	129.9	4.18	3.91	1470.
220	4.23	33.75	218	26.79	128.5	4.31	4.19	1470.
230	4.20	33.75	228	26.80	128.0	4.44	4.49	1470.
240	4.16	33.76	238	26.81	127.0	4.57	4.79	1470.
250	4.06	33.76	248	26.82	125.7	4.69	5.11	1470.
260	4.02	33.77	258	26.83	125.0	4.82	5.43	1470.
270	4.00	33.77	268	26.83	124.9	4.94	5.77	1470.
280	3.98	33.78	278	26.84	123.8	5.07	6.12	1470.
290	3.94	33.79	288	26.85	122.9	5.19	6.48	1470.
300	3.94	33.80	298	26.86	122.2	5.31	6.85	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 16

DATE 14/ 5/79

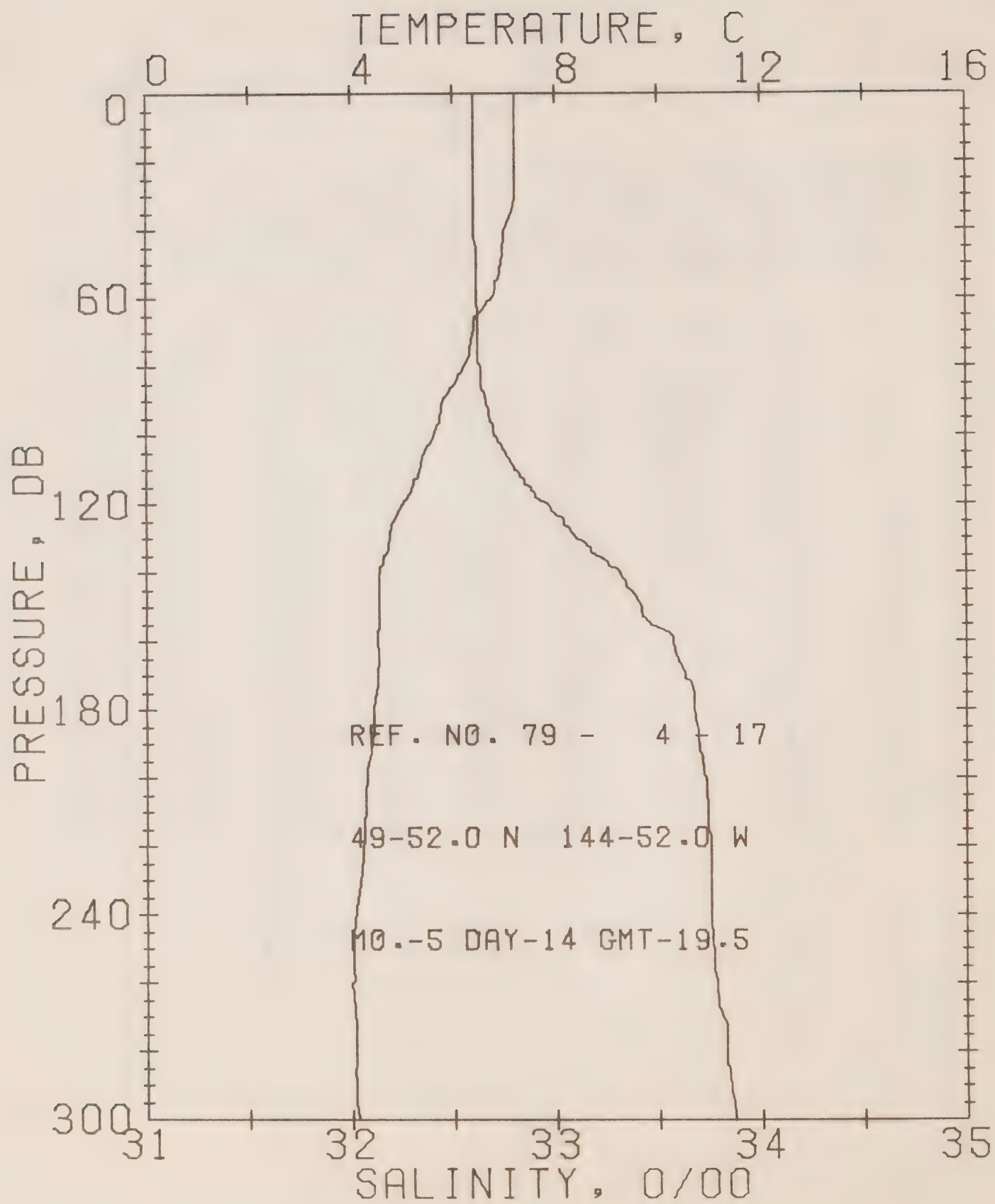
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 287 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.23	32.54	0	25.48	251.4	.00	.00	1477.
10	7.21	32.56	10	25.49	249.8	.25	.01	1477.
20	7.20	32.56	20	25.50	249.8	.50	.05	1477.
30	7.09	32.57	30	25.52	247.7	.75	.11	1477.
50	6.90	32.58	50	25.55	244.8	1.24	.31	1476.
75	5.95	32.63	75	25.71	229.7	1.84	.70	1473.
100	5.54	32.72	99	25.84	218.1	2.41	1.20	1472.
125	4.87	33.03	124	26.16	187.8	2.91	1.78	1470.
150	4.61	33.41	149	26.48	157.1	3.35	2.39	1470.
175	4.44	33.64	174	26.69	138.1	3.72	3.00	1470.
200	4.30	33.71	199	26.75	131.7	4.05	3.64	1470.
225	4.21	33.75	223	26.79	128.2	4.38	4.34	1470.
250	4.06	33.76	248	26.82	125.7	4.69	5.11	1470.
300	3.94	33.80	298	26.86	122.2	5.31	6.85	1470.
400	3.89	33.93	397	26.97	112.7	6.48	10.99	1471.
500	3.75	34.02	496	27.05	105.5	7.57	16.00	1473.
600	3.60	34.09	595	27.13	99.3	8.60	21.74	1474.
800	3.26	34.18	793	27.23	90.5	10.49	35.24	1476.
1000	2.96	34.24	990	27.31	83.9	12.23	51.19	1478.
1200	2.72	34.28	1188	27.36	79.5	13.87	69.46	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 17

DATE 14/ 5/79

POSITION 49-52.0N, 144-52.0W

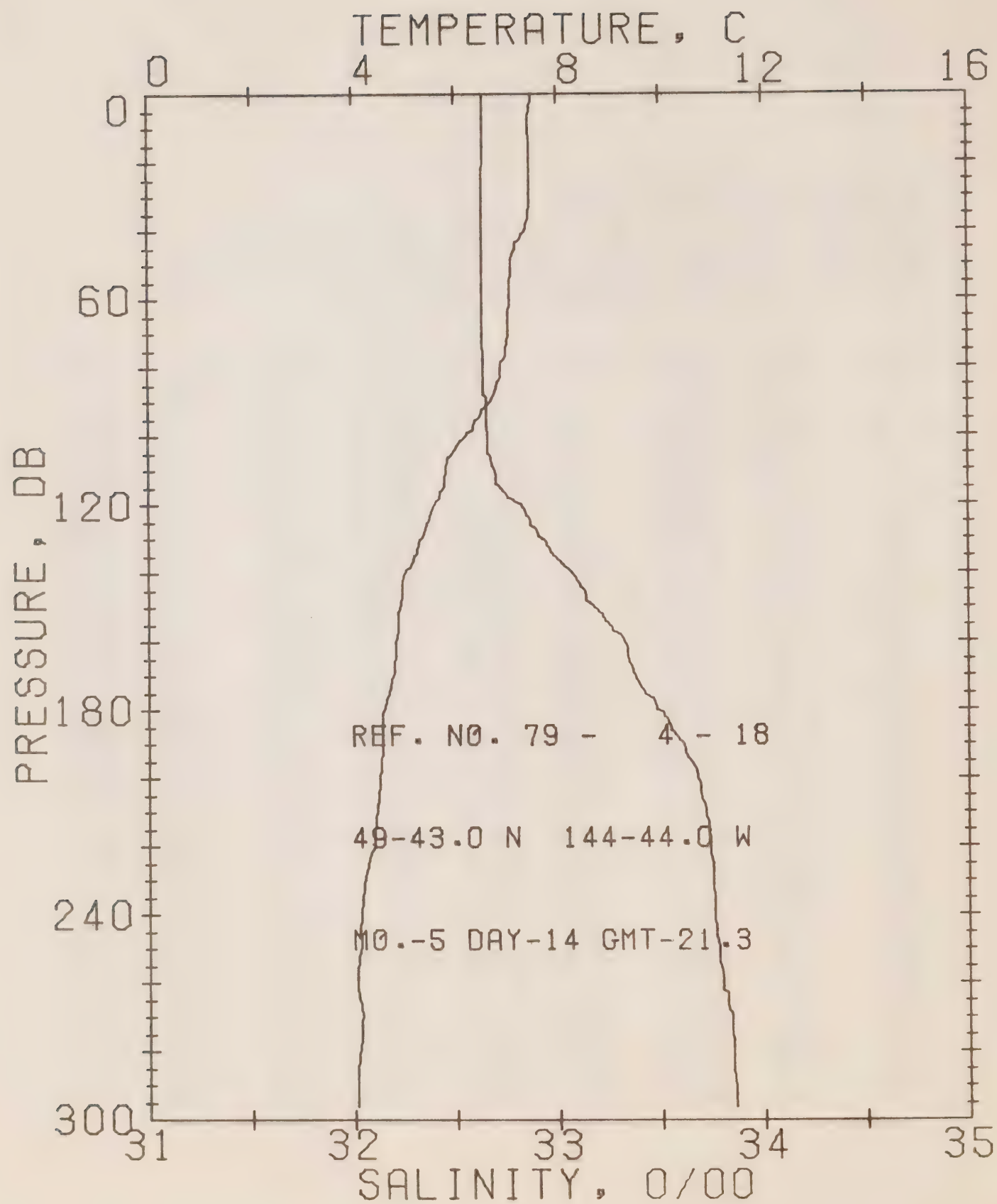
GMT 19.5

STATION E3

RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.19	32.60	0	25.53	246.4	.00	.00	1477.
10	7.20	32.60	10	25.53	246.6	.25	.01	1477.
20	7.20	32.60	20	25.53	246.8	.49	.05	1477.
30	7.19	32.60	30	25.53	246.8	.74	.11	1477.
40	6.99	32.60	40	25.56	244.3	.99	.20	1477.
50	6.93	32.61	50	25.57	243.0	1.23	.31	1476.
60	6.75	32.61	60	25.60	240.8	1.47	.45	1476.
70	6.37	32.62	70	25.65	235.5	1.71	.61	1475.
80	6.20	32.63	79	25.68	232.8	1.94	.78	1474.
90	5.79	32.66	89	25.76	225.8	2.17	.98	1473.
100	5.60	32.70	99	25.81	220.7	2.40	1.20	1472.
110	5.34	32.80	109	25.92	210.4	2.61	1.43	1471.
120	4.98	32.96	119	26.09	194.5	2.82	1.67	1470.
130	4.74	33.10	129	26.22	181.6	3.00	1.91	1470.
140	4.55	33.31	139	26.41	163.9	3.18	2.15	1469.
150	4.53	33.42	149	26.50	155.5	3.34	2.38	1469.
160	4.52	33.57	159	26.62	144.3	3.49	2.62	1470.
170	4.51	33.63	169	26.67	139.8	3.63	2.86	1470.
180	4.44	33.67	179	26.71	136.0	3.77	3.10	1470.
190	4.40	33.69	189	26.73	133.9	3.90	3.36	1470.
200	4.29	33.72	199	26.77	130.6	4.03	3.62	1470.
210	4.27	33.74	209	26.78	129.4	4.16	3.89	1470.
220	4.22	33.75	218	26.79	128.2	4.29	4.17	1470.
230	4.16	33.75	228	26.80	127.7	4.42	4.47	1470.
240	4.07	33.75	238	26.81	126.8	4.55	4.77	1469.
250	4.02	33.77	248	26.83	125.3	4.67	5.09	1469.
260	4.01	33.78	258	26.84	124.1	4.80	5.41	1469.
270	4.06	33.81	268	26.86	122.5	4.92	5.75	1470.
280	4.09	33.83	278	26.87	121.4	5.04	6.09	1470.
290	4.09	33.85	288	26.89	120.0	5.16	6.44	1470.
300	4.13	33.87	298	26.90	119.0	5.28	6.80	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 18

DATE 14/ 5/79

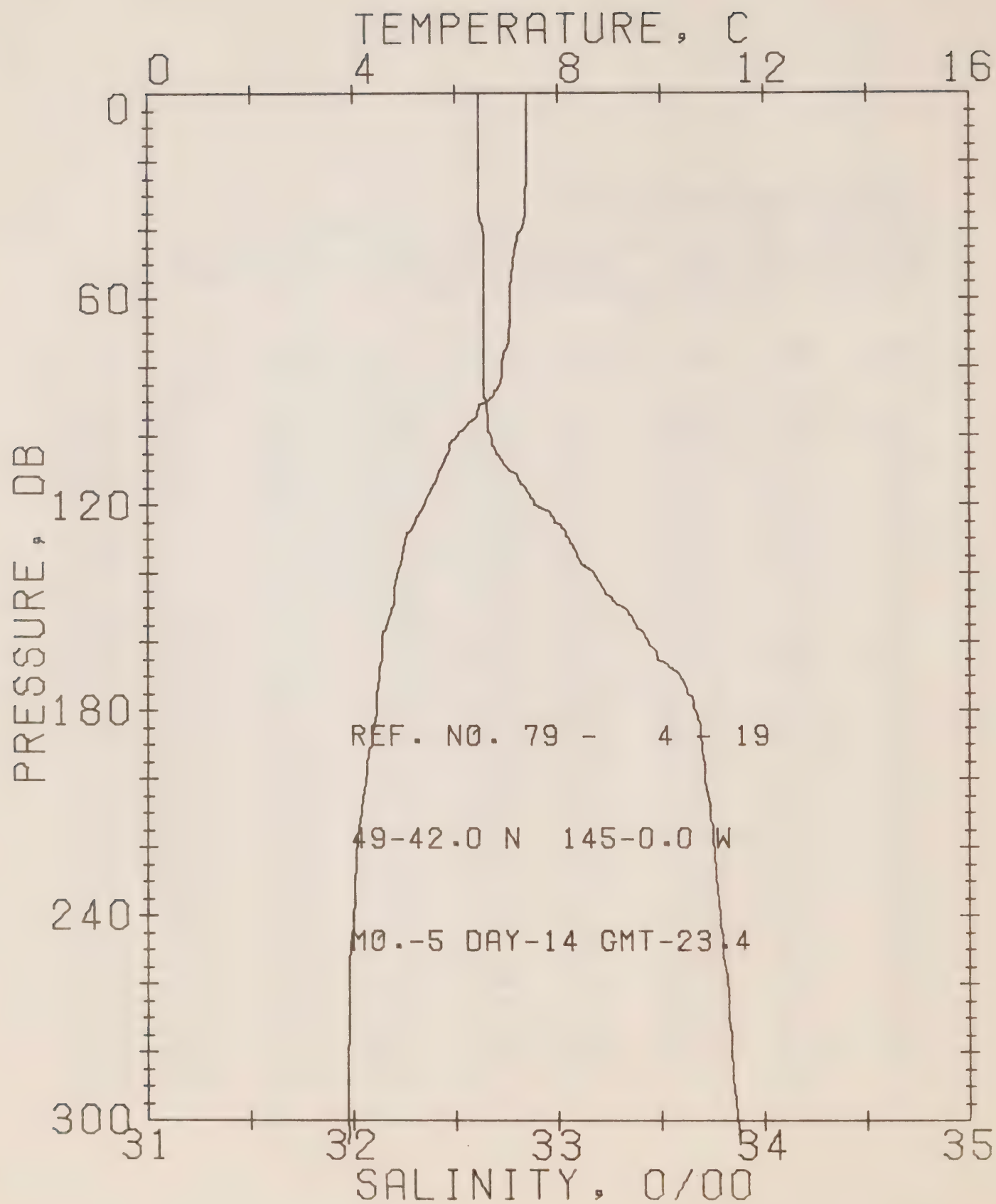
POSITION 49-43.0N, 144-44.0W GMT 21.3 STATION E4

RESULTS OF STP CAST

196 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.49	32.64	0	25.52	247.3	.00	.00	1478.
10	7.45	32.64	10	25.52	246.9	.25	.01	1478.
20	7.46	32.64	20	25.52	247.4	.49	.05	1478.
30	7.46	32.63	30	25.52	248.1	.74	.11	1478.
40	7.36	32.63	40	25.53	246.9	.99	.20	1478.
50	7.09	32.63	50	25.57	243.5	1.23	.31	1477.
60	7.06	32.63	60	25.57	243.3	1.48	.45	1477.
70	7.03	32.63	70	25.57	243.0	1.72	.61	1477.
80	6.87	32.64	80	25.60	240.3	1.96	.80	1477.
90	6.68	32.65	89	25.64	237.3	2.20	1.00	1476.
100	6.19	32.66	99	25.71	230.6	2.44	1.23	1474.
110	5.80	32.69	109	25.78	223.9	2.66	1.47	1473.
120	5.57	32.82	119	25.91	211.6	2.88	1.73	1472.
130	5.32	32.93	129	26.02	200.6	3.09	2.00	1472.
140	5.02	33.07	139	26.16	187.3	3.29	2.26	1471.
150	4.90	33.18	149	26.27	177.5	3.47	2.53	1471.
160	4.84	33.33	159	26.39	165.7	3.64	2.80	1471.
170	4.77	33.37	169	26.44	161.7	3.80	3.08	1471.
180	4.59	33.49	179	26.55	151.2	3.96	3.36	1470.
190	4.56	33.61	189	26.65	142.0	4.11	3.63	1470.
200	4.52	33.68	199	26.71	136.4	4.25	3.91	1471.
210	4.44	33.72	209	26.75	132.7	4.38	4.19	1470.
220	4.40	33.74	218	26.77	130.8	4.51	4.48	1470.
230	4.20	33.75	228	26.80	128.1	4.64	4.78	1470.
240	4.12	33.76	238	26.81	126.6	4.77	5.08	1470.
250	4.11	33.78	248	26.83	125.1	4.89	5.40	1470.
260	4.06	33.80	258	26.85	123.1	5.02	5.72	1470.
270	4.15	33.84	268	26.87	121.1	5.14	6.05	1470.
280	4.10	33.85	278	26.89	119.9	5.26	6.39	1470.
290	4.05	33.86	288	26.90	118.9	5.38	6.73	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 19

DATE 14/ 5/79

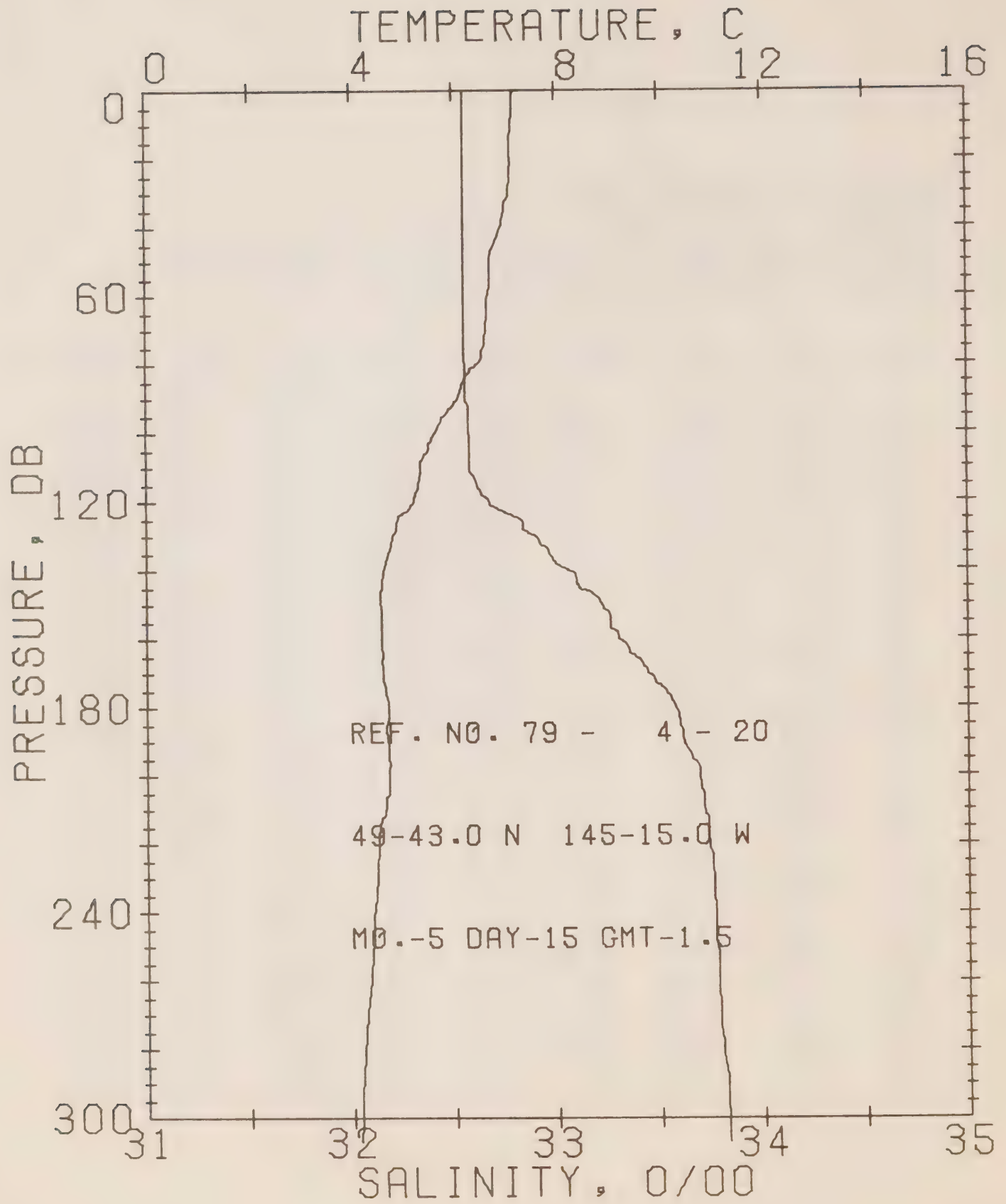
POSITION 49-42.0N, 145- .0W GMT 23.4

STATION C1

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.40	32.61	0	25.51	248.4	.00	.00	1477.
10	7.38	32.61	10	25.51	248.3	.25	.01	1478.
20	7.39	32.61	20	25.51	248.5	.50	.05	1478.
30	7.37	32.61	30	25.51	248.4	.75	.11	1478.
40	7.27	32.63	40	25.54	245.7	.99	.20	1478.
50	7.11	32.64	50	25.57	243.0	1.24	.31	1477.
60	7.06	32.64	60	25.58	242.6	1.48	.45	1477.
70	7.04	32.64	70	25.58	242.4	1.72	.61	1477.
80	6.92	32.64	80	25.60	240.9	1.96	.80	1477.
90	6.61	32.65	89	25.65	236.4	2.20	1.00	1476.
100	6.02	32.67	99	25.74	227.9	2.44	1.23	1474.
110	5.69	32.76	109	25.85	217.4	2.66	1.47	1473.
120	5.38	32.89	119	25.99	204.2	2.87	1.71	1472.
130	5.02	33.05	129	26.15	188.3	3.06	1.96	1471.
140	4.86	33.17	139	26.27	177.7	3.25	2.21	1470.
150	4.76	33.32	149	26.39	165.5	3.42	2.47	1470.
160	4.56	33.44	159	26.51	154.5	3.58	2.72	1470.
170	4.51	33.59	169	26.64	142.8	3.73	2.97	1470.
180	4.45	33.66	179	26.70	136.6	3.87	3.22	1470.
190	4.36	33.70	189	26.74	133.1	4.00	3.47	1470.
200	4.25	33.71	199	26.76	131.3	4.14	3.74	1469.
210	4.15	33.74	209	26.79	128.1	4.26	4.01	1469.
220	4.06	33.75	218	26.81	126.2	4.39	4.29	1469.
230	4.02	33.77	228	26.83	124.6	4.52	4.57	1469.
240	4.00	33.79	238	26.85	123.1	4.64	4.87	1469.
250	3.94	33.80	248	26.86	121.9	4.76	5.18	1469.
260	3.91	33.82	258	26.88	120.1	4.88	5.49	1469.
270	3.91	33.83	268	26.89	119.4	5.00	5.81	1469.
280	3.90	33.84	278	26.90	118.6	5.12	6.15	1469.
290	3.90	33.85	288	26.91	117.7	5.24	6.49	1470.
300	3.89	33.87	298	26.92	116.4	5.36	6.84	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 20

DATE 15/ 5/79

POSITION 49-43.0N, 145-15.0W

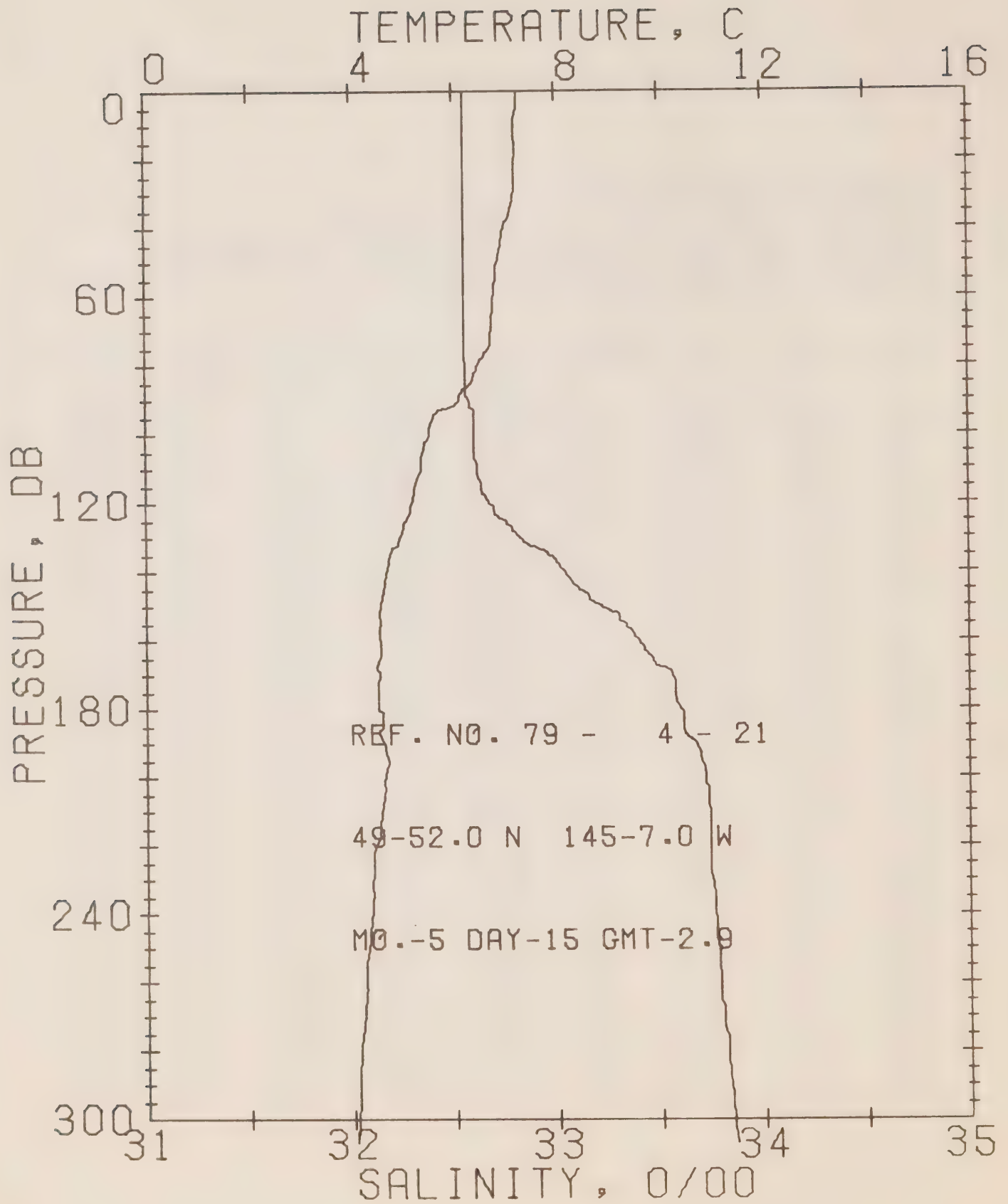
GMT 1.5

STATION W4

RESULTS OF STP CAST 188 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.20	32.55	0	25.49	250.2	.00	.00	1477.
10	7.14	32.55	10	25.50	249.6	.25	.01	1477.
20	7.14	32.55	20	25.50	249.7	.50	.05	1477.
30	7.08	32.55	30	25.50	249.1	.75	.11	1477.
40	6.93	32.55	40	25.52	247.3	1.00	.20	1476.
50	6.73	32.55	50	25.55	244.9	1.24	.32	1476.
60	6.69	32.55	60	25.56	244.5	1.49	.45	1476.
70	6.63	32.55	70	25.56	243.9	1.73	.61	1476.
80	6.45	32.56	80	25.59	241.0	1.98	.80	1475.
90	6.07	32.56	89	25.64	236.6	2.21	1.01	1474.
100	5.64	32.57	99	25.70	230.9	2.45	1.23	1472.
110	5.37	32.58	109	25.74	227.1	2.67	1.48	1471.
120	5.22	32.67	119	25.83	218.9	2.90	1.74	1471.
130	4.79	32.90	129	26.06	197.1	3.11	2.00	1469.
140	4.61	33.06	139	26.21	183.3	3.30	2.27	1469.
150	4.57	33.22	149	26.34	171.0	3.47	2.53	1469.
160	4.59	33.31	159	26.41	164.5	3.64	2.79	1470.
170	4.60	33.45	169	26.52	154.2	3.80	3.06	1470.
180	4.71	33.58	179	26.61	145.8	3.95	3.33	1471.
190	4.70	33.61	189	26.63	143.2	4.09	3.60	1471.
200	4.73	33.69	199	26.69	137.9	4.23	3.88	1471.
210	4.64	33.72	209	26.72	135.1	4.37	4.16	1471.
220	4.52	33.74	218	26.75	132.1	4.50	4.45	1471.
230	4.48	33.76	228	26.77	130.3	4.64	4.75	1471.
240	4.42	33.77	238	26.79	129.0	4.77	5.07	1471.
250	4.38	33.78	248	26.80	128.3	4.89	5.39	1471.
260	4.34	33.78	258	26.80	127.5	5.02	5.72	1471.
270	4.27	33.79	268	26.82	126.2	5.15	6.06	1471.
280	4.22	33.80	278	26.83	124.9	5.27	6.41	1471.
290	4.18	33.82	288	26.85	123.2	5.40	6.77	1471.
300	4.15	33.83	298	26.86	122.3	5.52	7.14	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 21

DATE 15/ 5/79

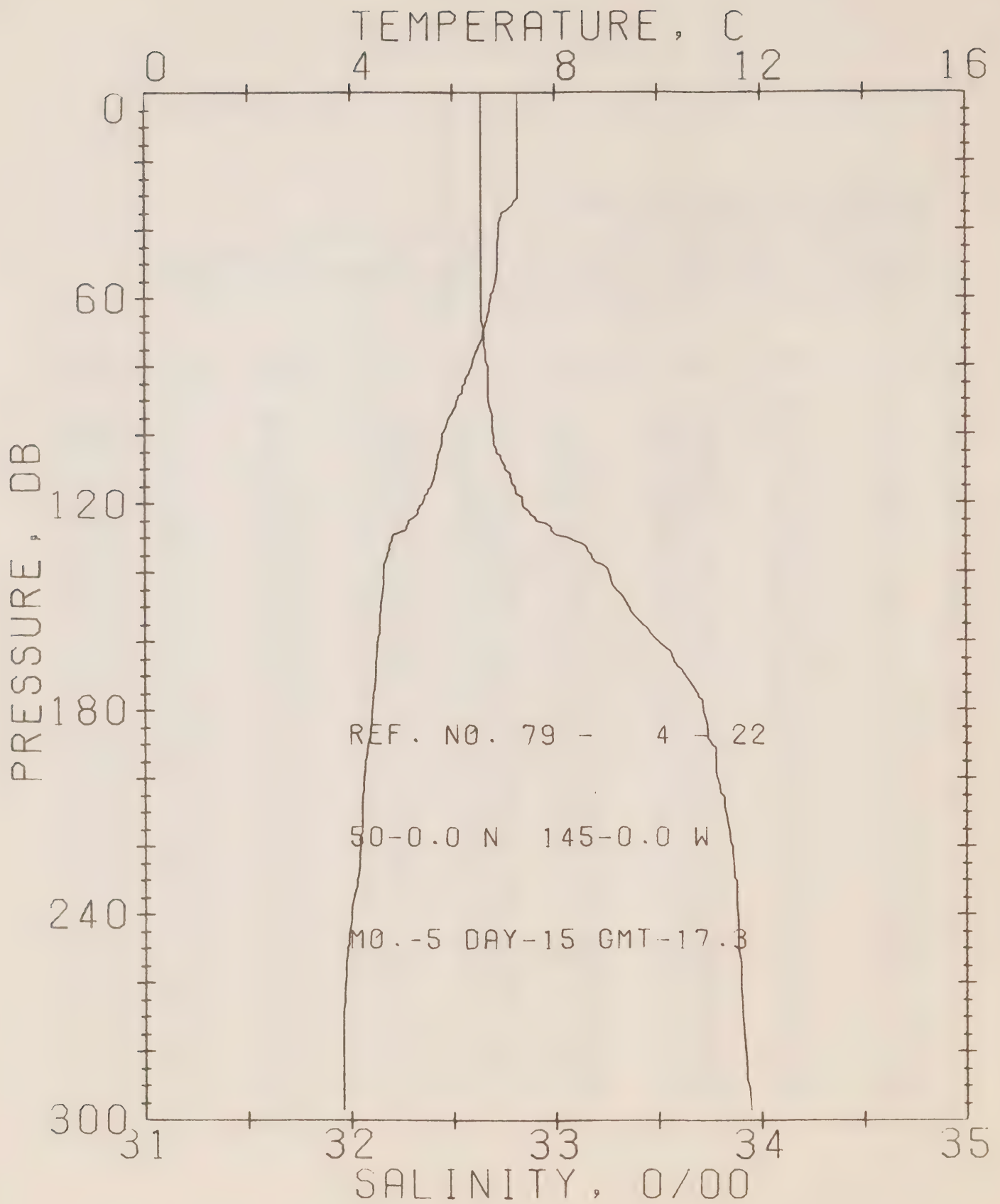
POSITION 49-52.0N, 145- 7.0W GMT 2.9

STATION W3

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.25	32.55	0	25.48	250.9	.00	.00	1477.
10	7.21	32.55	10	25.49	250.5	.25	.01	1477.
20	7.21	32.55	20	25.49	250.7	.50	.05	1477.
30	7.18	32.55	30	25.49	250.4	.75	.11	1477.
40	6.98	32.55	40	25.52	247.9	1.00	.20	1476.
50	6.86	32.55	50	25.53	246.5	1.25	.32	1476.
60	6.78	32.55	60	25.54	245.7	1.49	.46	1476.
70	6.74	32.55	70	25.55	245.2	1.74	.62	1476.
80	6.46	32.56	80	25.59	241.2	1.98	.80	1475.
90	6.10	32.57	89	25.65	236.2	2.22	1.01	1474.
100	5.51	32.60	99	25.74	227.2	2.45	1.23	1472.
110	5.35	32.61	109	25.77	224.7	2.68	1.48	1471.
120	5.18	32.67	119	25.83	218.4	2.90	1.74	1471.
130	4.94	32.82	129	25.98	204.7	3.11	2.01	1470.
140	4.67	33.04	139	26.18	185.4	3.31	2.27	1469.
150	4.55	33.22	149	26.34	170.7	3.48	2.54	1469.
160	4.56	33.40	159	26.48	157.5	3.65	2.79	1470.
170	4.54	33.56	169	26.61	145.3	3.80	3.05	1470.
180	4.52	33.60	179	26.64	142.2	3.94	3.31	1470.
190	4.63	33.67	189	26.69	138.3	4.09	3.57	1471.
200	4.64	33.72	199	26.72	134.7	4.22	3.84	1471.
210	4.57	33.74	209	26.75	132.6	4.36	4.12	1471.
220	4.42	33.74	218	26.76	131.1	4.49	4.41	1471.
230	4.38	33.75	228	26.77	130.3	4.62	4.71	1471.
240	4.36	33.76	238	26.79	129.1	4.75	5.02	1471.
250	4.30	33.78	248	26.81	127.1	4.88	5.34	1471.
260	4.24	33.79	258	26.82	125.8	5.00	5.67	1470.
270	4.21	33.80	268	26.83	124.8	5.13	6.01	1471.
280	4.13	33.82	278	26.86	122.6	5.25	6.36	1470.
290	4.11	33.83	288	26.87	121.2	5.37	6.71	1470.
300	4.08	33.85	298	26.88	120.2	5.49	7.07	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 22

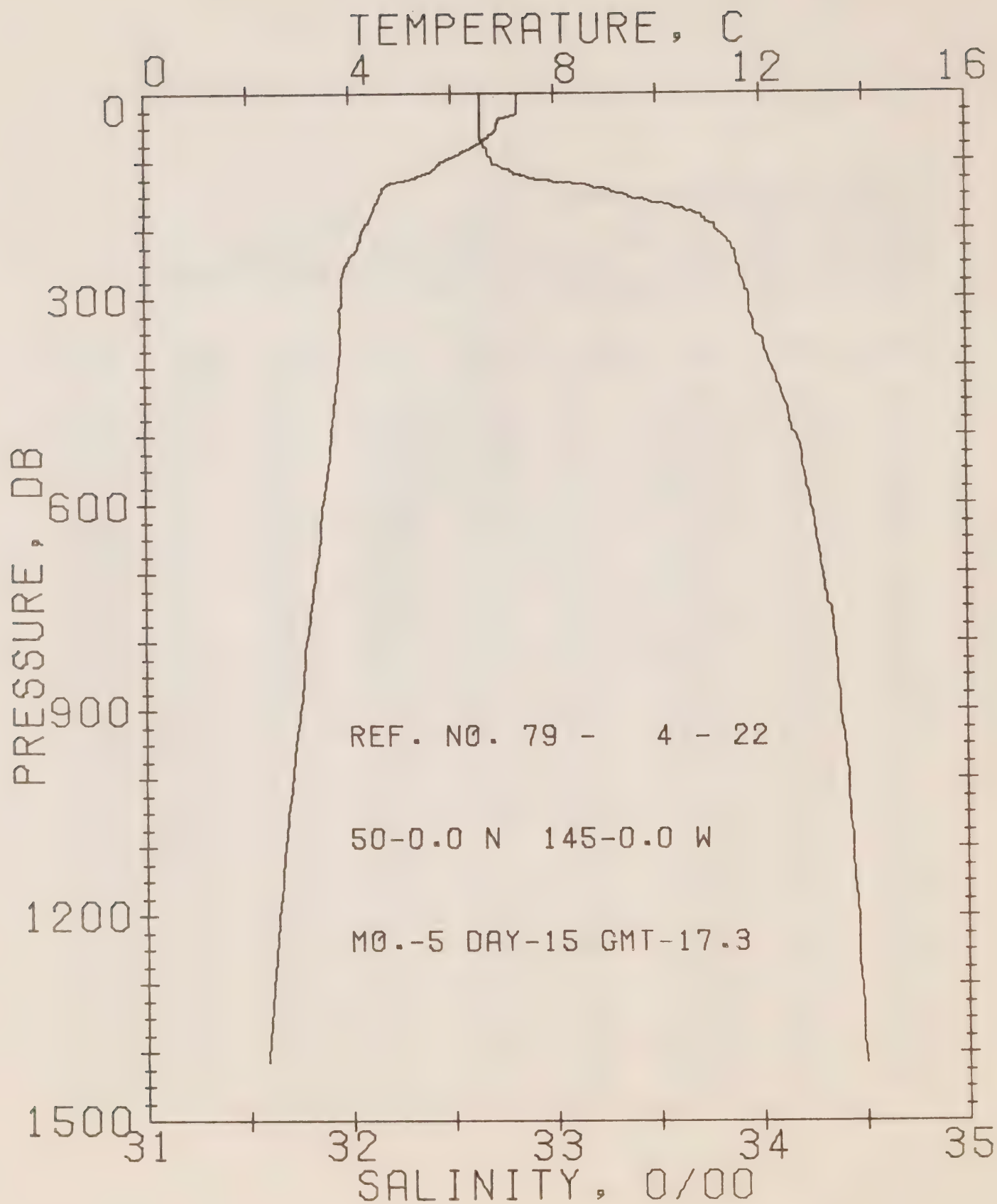
DATE 15/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.28	32.64	0	25.55	244.6	.00	.00	1477.
10	7.27	32.64	10	25.55	244.6	.24	.01	1477.
20	7.27	32.64	20	25.55	244.7	.49	.05	1477.
30	7.27	32.64	30	25.55	244.8	.73	.11	1478.
40	6.92	32.64	40	25.60	240.5	.98	.20	1476.
50	6.87	32.64	50	25.60	239.9	1.22	.31	1476.
60	6.74	32.64	60	25.62	238.4	1.46	.44	1476.
70	6.59	32.65	70	25.65	235.9	1.69	.60	1475.
80	6.37	32.67	79	25.69	231.8	1.93	.78	1475.
90	6.09	32.67	89	25.73	228.6	2.16	.98	1474.
100	5.79	32.70	99	25.79	222.9	2.38	1.20	1473.
110	5.67	32.75	109	25.84	217.9	2.60	1.43	1473.
120	5.42	32.84	119	25.94	208.4	2.82	1.68	1472.
130	4.81	33.06	129	26.18	185.3	3.02	1.94	1470.
140	4.64	33.26	139	26.36	168.7	3.19	2.18	1470.
150	4.59	33.36	149	26.44	160.7	3.36	2.42	1470.
160	4.52	33.49	159	26.56	150.0	3.51	2.67	1470.
170	4.47	33.63	169	26.67	139.4	3.66	2.91	1470.
180	4.41	33.72	179	26.75	132.2	3.79	3.15	1470.
190	4.33	33.76	189	26.79	128.3	3.92	3.40	1470.
200	4.25	33.79	199	26.82	125.3	4.05	3.65	1470.
210	4.21	33.83	209	26.85	122.3	4.17	3.91	1470.
220	4.18	33.86	218	26.88	119.6	4.29	4.17	1470.
230	4.11	33.88	228	26.91	117.4	4.41	4.44	1470.
240	4.01	33.88	238	26.92	116.1	4.53	4.72	1469.
250	3.91	33.89	248	26.94	114.8	4.64	5.01	1469.
260	3.88	33.90	258	26.95	113.9	4.76	5.31	1469.
270	3.85	33.91	268	26.96	112.8	4.87	5.61	1469.
280	3.85	33.92	278	26.97	112.0	4.98	5.93	1469.
290	3.85	33.94	288	26.98	111.0	5.10	6.25	1470.
300	3.83	33.95	298	26.99	109.9	5.21	6.59	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 22

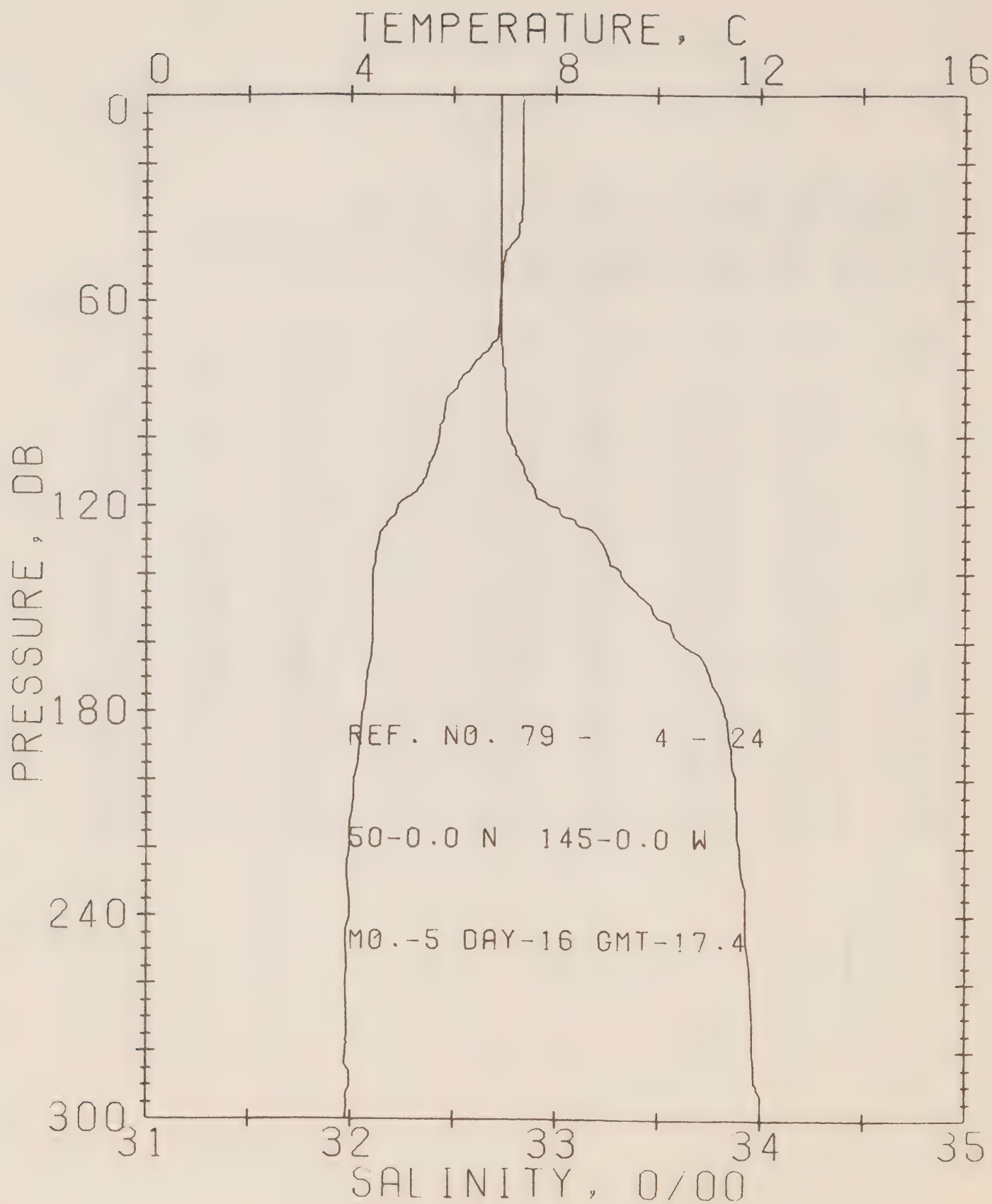
DATE 15/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 287 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

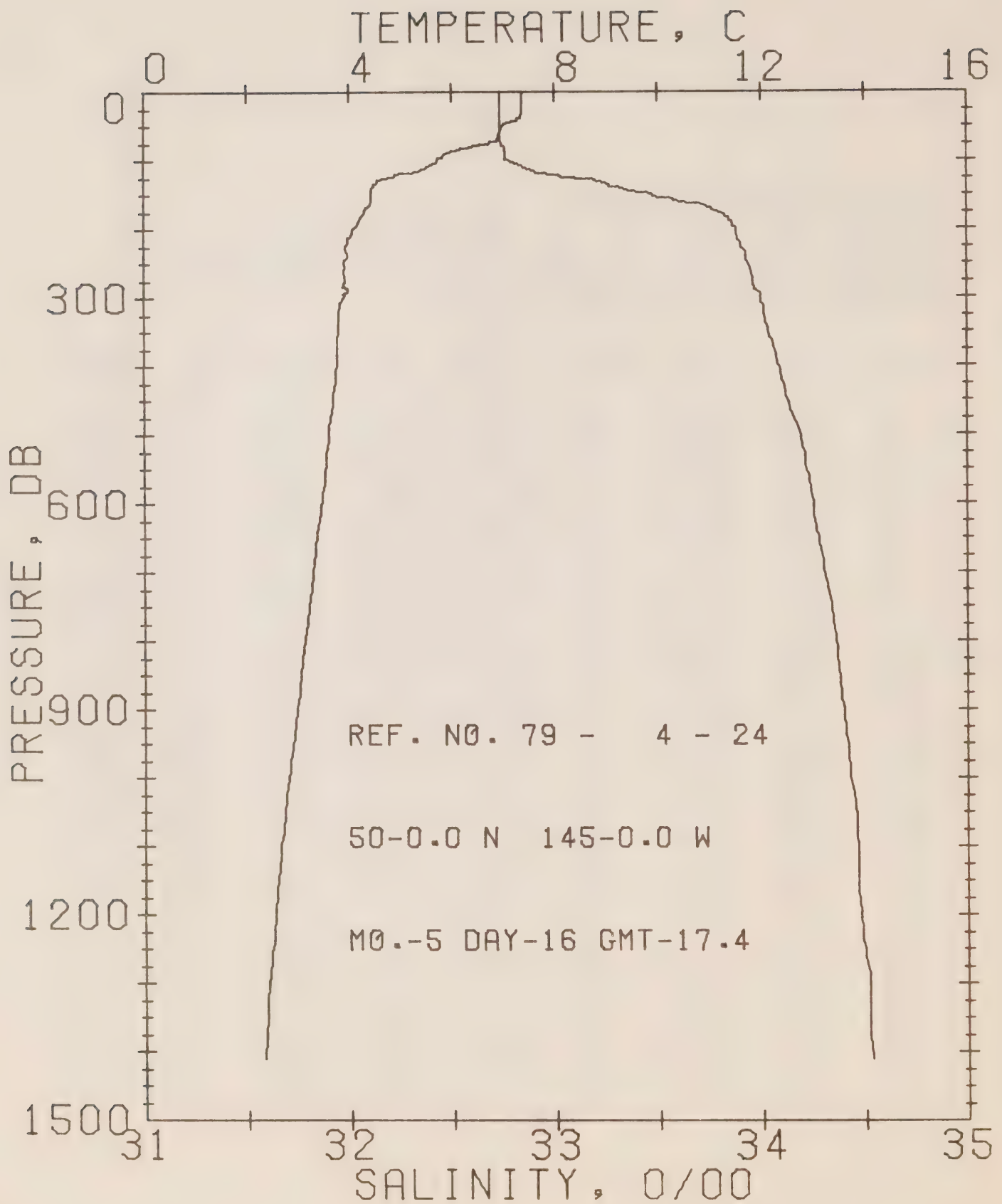
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.28	32.64	0	25.55	244.6	.00	.00	1477.
10	7.27	32.64	10	25.55	244.6	.24	.01	1477.
20	7.27	32.64	20	25.55	244.7	.49	.05	1477.
30	7.27	32.64	30	25.55	244.8	.73	.11	1478.
50	6.87	32.64	50	25.60	239.9	1.22	.31	1476.
75	6.47	32.66	75	25.67	233.8	1.81	.69	1475.
100	5.79	32.70	99	25.79	222.9	2.38	1.20	1473.
125	5.13	32.91	124	26.03	200.0	2.92	1.81	1471.
150	4.59	33.36	149	26.44	160.7	3.36	2.42	1470.
175	4.43	33.69	174	26.72	134.5	3.72	3.03	1470.
200	4.25	33.79	199	26.82	125.3	4.05	3.65	1470.
225	4.15	33.87	223	26.89	118.8	4.35	4.31	1470.
250	3.91	33.89	248	26.94	114.8	4.64	5.01	1469.
300	3.83	33.95	298	26.99	109.9	5.21	6.59	1470.
400	3.77	34.05	397	27.08	102.6	6.28	10.40	1471.
500	3.62	34.17	496	27.19	93.0	7.25	14.87	1472.
600	3.46	34.24	595	27.26	86.6	8.15	19.89	1473.
800	3.13	34.36	793	27.39	75.7	9.77	31.44	1475.
1000	2.85	34.42	990	27.46	69.4	11.23	44.77	1478.
1200	2.58	34.47	1188	27.52	64.1	12.57	59.76	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 24 DATE 16/ 5/79
 POSITION 50- .0N, 145- .0W GMT 17.4 STATION P
 RESULTS OF STP CAST 164 POINTS TAKEN FROM ANALOG TRACE
 GUIDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.37	32.73	0	25.61	239.0	.00	.00	1478.
10	7.35	32.73	10	25.61	238.9	.24	.01	1478.
20	7.35	32.73	20	25.61	239.0	.48	.05	1478.
30	7.35	32.73	30	25.61	239.2	.72	.11	1478.
40	7.28	32.73	40	25.62	238.4	.96	.19	1478.
50	6.97	32.73	50	25.66	234.5	1.19	.30	1477.
60	6.91	32.73	60	25.67	233.9	1.43	.43	1477.
70	6.88	32.73	70	25.67	233.6	1.66	.59	1477.
80	6.34	32.75	79	25.76	225.5	1.89	.77	1475.
90	5.86	32.76	89	25.83	219.1	2.11	.96	1473.
100	5.71	32.78	99	25.86	216.0	2.33	1.17	1473.
110	5.48	32.85	109	25.94	208.2	2.54	1.40	1472.
120	4.92	32.97	119	26.10	193.1	2.75	1.63	1470.
130	4.55	33.22	129	26.34	170.8	2.93	1.86	1469.
140	4.44	33.32	139	26.43	162.0	3.09	2.09	1469.
150	4.44	33.47	149	26.55	150.5	3.25	2.32	1469.
160	4.42	33.61	159	26.66	140.3	3.39	2.55	1469.
170	4.33	33.76	169	26.79	128.5	3.53	2.78	1469.
180	4.23	33.83	179	26.86	122.0	3.65	3.00	1469.
190	4.17	33.86	189	26.88	119.4	3.77	3.23	1469.
200	4.06	33.88	199	26.91	116.7	3.89	3.46	1469.
210	4.01	33.89	209	26.93	115.5	4.01	3.71	1469.
220	3.97	33.90	218	26.94	114.4	4.12	3.96	1469.
230	3.94	33.92	228	26.95	112.9	4.24	4.22	1469.
240	3.97	33.93	238	26.96	112.4	4.35	4.49	1469.
250	3.90	33.94	248	26.97	111.2	4.46	4.77	1469.
260	3.90	33.95	258	26.99	110.2	4.57	5.05	1469.
270	3.92	33.96	268	26.99	109.9	4.68	5.35	1470.
280	3.90	33.96	278	26.99	109.6	4.79	5.66	1470.
290	3.97	33.98	288	27.00	109.0	4.90	5.98	1470.
300	3.89	34.00	298	27.03	106.8	5.01	6.30	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 24

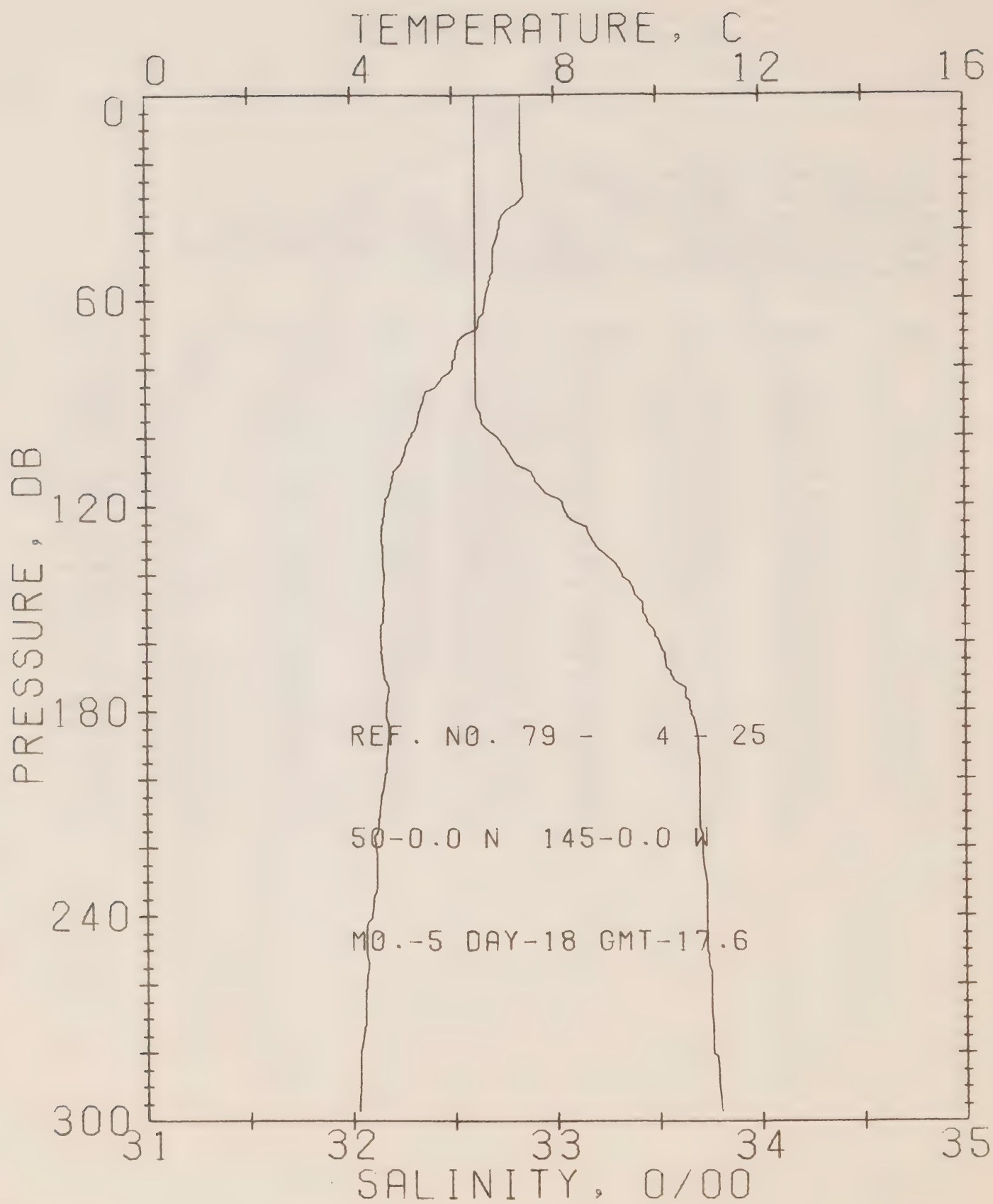
DATE 16/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 278 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.37	32.73	0	25.61	239.0	.00	.00	1478.
10	7.35	32.73	10	25.61	238.9	.24	.01	1478.
20	7.35	32.73	20	25.61	239.0	.48	.05	1478.
30	7.35	32.73	30	25.61	239.2	.72	.11	1478.
50	6.97	32.73	50	25.66	234.5	1.19	.30	1477.
75	6.68	32.74	75	25.71	230.4	1.78	.68	1476.
100	5.71	32.78	99	25.86	216.0	2.33	1.17	1473.
125	4.70	33.10	124	26.23	181.1	2.84	1.75	1469.
150	4.44	33.47	149	26.55	150.5	3.25	2.32	1469.
175	4.30	33.80	174	26.82	124.9	3.59	2.89	1469.
200	4.06	33.88	199	26.91	116.7	3.89	3.46	1469.
225	3.91	33.90	223	26.95	113.6	4.18	4.09	1469.
250	3.90	33.94	248	26.97	111.2	4.46	4.77	1469.
300	3.89	34.00	298	27.03	106.8	5.01	6.30	1470.
400	3.75	34.08	397	27.11	99.8	6.04	9.98	1471.
500	3.59	34.19	496	27.20	91.3	7.00	14.37	1472.
600	3.45	34.25	595	27.27	85.8	7.89	19.33	1473.
800	3.11	34.36	793	27.39	75.5	9.50	30.78	1475.
1000	2.80	34.43	990	27.47	68.0	10.93	43.90	1477.
1200	2.53	34.48	1188	27.53	62.7	12.22	58.41	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 25

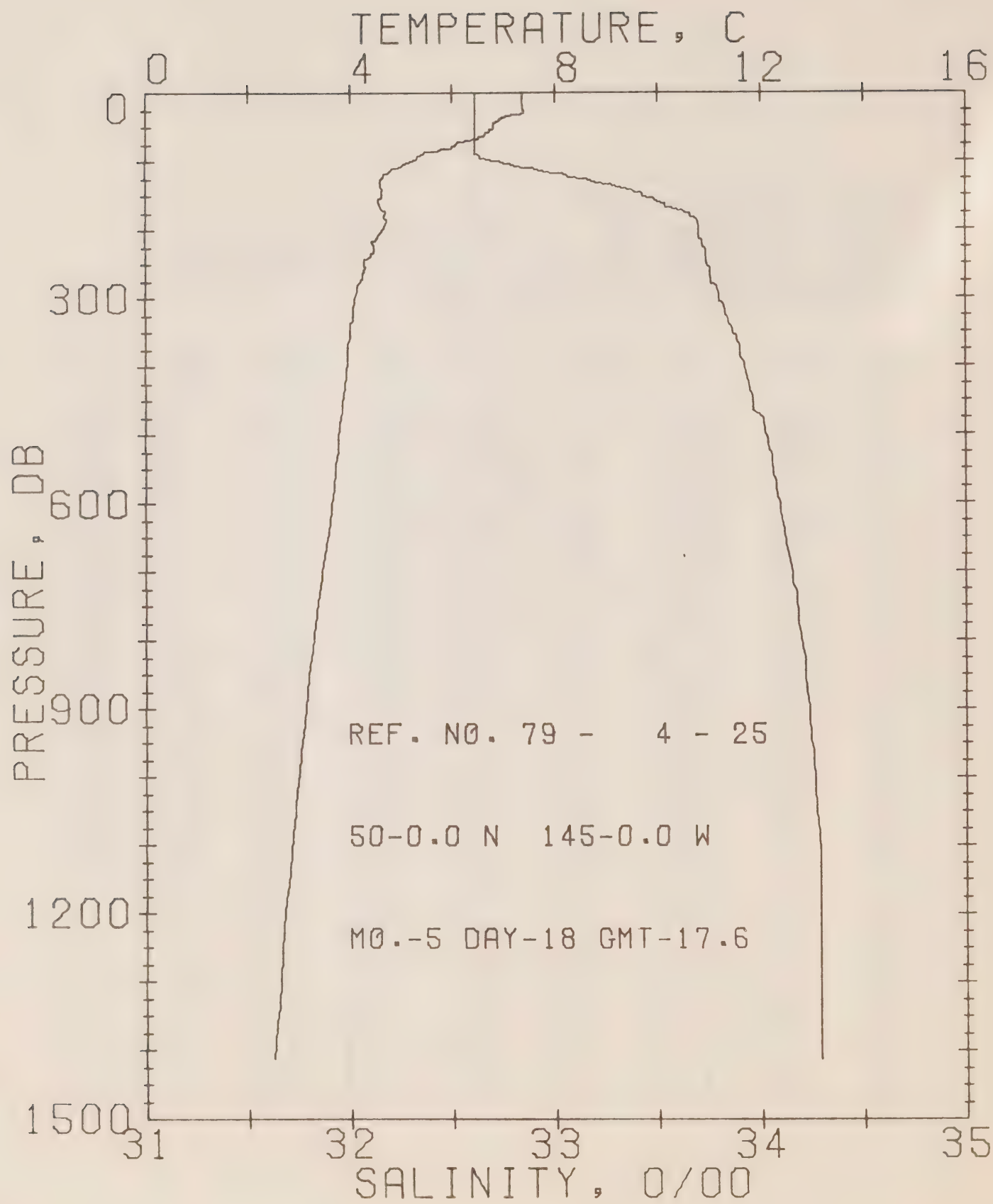
DATE 18/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.6 STATION P

RESULTS OF STP CAST 195 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.37	32.61	0	25.51	248.0	.00	.00	1477.
10	7.36	32.61	10	25.51	248.0	.25	.01	1477.
20	7.38	32.61	20	25.51	248.4	.50	.05	1478.
30	7.42	32.61	30	25.50	249.1	.74	.11	1478.
40	6.91	32.61	40	25.57	242.6	.99	.20	1476.
50	6.81	32.61	50	25.59	241.4	1.23	.31	1476.
60	6.65	32.61	60	25.61	239.5	1.47	.45	1475.
70	6.26	32.61	70	25.66	234.9	1.71	.60	1474.
80	5.99	32.61	79	25.69	231.8	1.94	.78	1473.
90	5.41	32.61	89	25.76	225.2	2.17	.98	1471.
100	5.18	32.72	99	25.87	214.5	2.39	1.19	1470.
110	4.83	32.86	109	26.04	198.8	2.60	1.42	1469.
120	4.66	33.03	119	26.18	185.4	2.79	1.64	1469.
130	4.59	33.16	129	26.30	174.0	2.97	1.87	1469.
140	4.64	33.33	139	26.42	163.4	3.14	2.10	1470.
150	4.60	33.43	149	26.50	155.5	3.30	2.34	1470.
160	4.57	33.51	159	26.56	149.5	3.45	2.58	1470.
170	4.64	33.57	169	26.61	145.7	3.60	2.83	1470.
180	4.66	33.66	179	26.67	139.2	3.74	3.08	1471.
190	4.70	33.69	189	26.69	137.5	3.88	3.34	1471.
200	4.62	33.70	199	26.71	136.0	4.02	3.61	1471.
210	4.53	33.70	209	26.72	135.1	4.15	3.90	1471.
220	4.46	33.71	218	26.74	133.7	4.29	4.19	1471.
230	4.48	33.73	228	26.75	132.5	4.42	4.50	1471.
240	4.38	33.73	238	26.76	131.6	4.55	4.81	1471.
250	4.28	33.73	248	26.77	130.6	4.68	5.14	1470.
260	4.27	33.75	258	26.79	129.1	4.81	5.48	1471.
270	4.25	33.76	268	26.79	128.5	4.94	5.83	1471.
280	4.13	33.76	278	26.81	127.0	5.07	6.18	1470.
290	4.12	33.79	288	26.84	124.7	5.20	6.55	1470.
300	4.10	33.80	298	26.85	123.8	5.32	6.92	1471.



OFFSHORE OCEANOGRAPH, GROUP

REFERENCE NO. 79- 4- 25

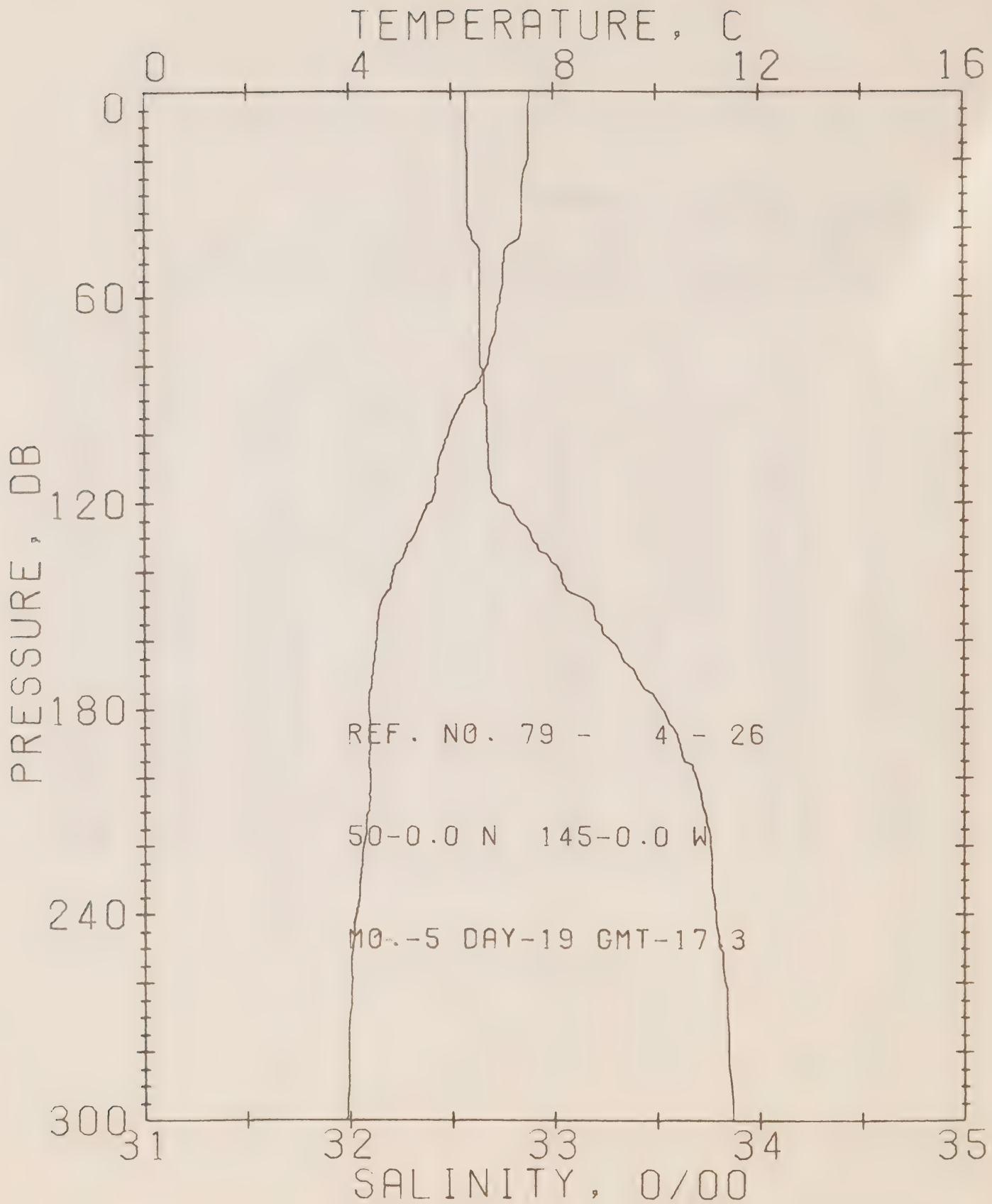
DATE 18/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.6 STATION P

RESULTS OF STP CAST 302 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.37	32.61	0	25.51	248.0	.00	.00	1477.
10	7.36	32.61	10	25.51	248.0	.25	.01	1477.
20	7.38	32.61	20	25.51	248.4	.50	.05	1478.
30	7.42	32.61	30	25.50	249.1	.74	.11	1478.
50	6.81	32.61	50	25.59	241.4	1.23	.31	1476.
75	6.06	32.61	75	25.68	232.5	1.83	.69	1473.
100	5.18	32.72	99	25.87	214.5	2.39	1.19	1470.
125	4.61	33.11	124	26.25	179.4	2.89	1.76	1469.
150	4.60	33.43	149	26.50	155.5	3.30	2.34	1470.
175	4.71	33.63	174	26.65	142.0	3.67	2.95	1471.
200	4.62	33.70	199	26.71	136.0	4.02	3.61	1471.
225	4.48	33.72	223	26.74	133.4	4.35	4.34	1471.
250	4.28	33.73	248	26.77	130.6	4.68	5.14	1470.
300	4.10	33.80	298	26.85	123.8	5.32	6.92	1471.
400	3.94	33.92	397	26.96	114.0	6.51	11.14	1472.
500	3.77	34.02	496	27.06	105.3	7.61	16.18	1473.
600	3.64	34.09	595	27.12	99.7	8.63	21.93	1474.
800	3.26	34.19	793	27.24	89.4	10.52	35.37	1476.
1000	2.97	34.26	990	27.32	82.6	12.24	51.12	1478.
1200	2.71	34.29	1188	27.37	78.6	13.84	69.10	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 26

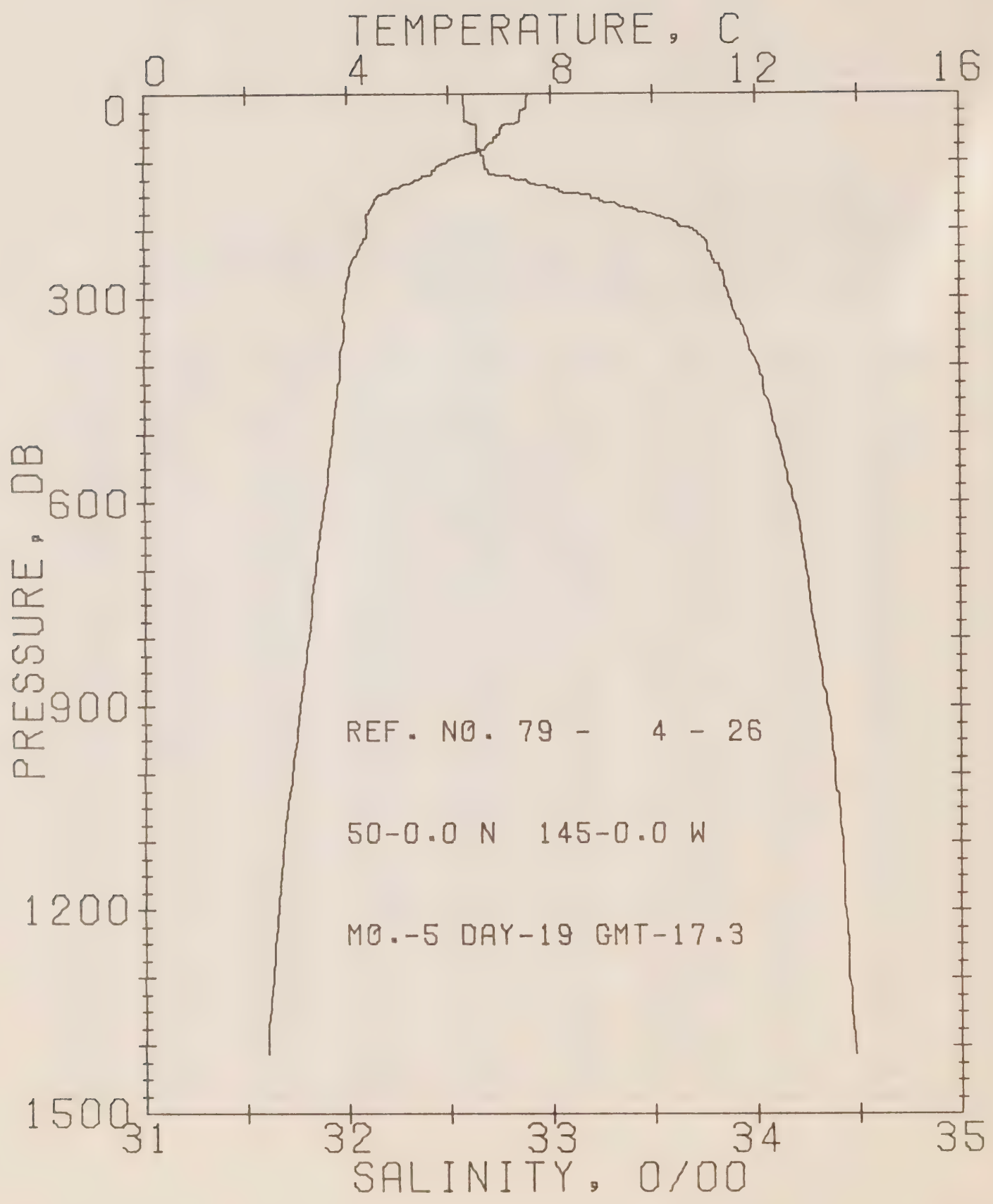
DATE 19/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.54	32.57	0	25.46	253.2	.00	.00	1478.
10	7.53	32.57	10	25.46	253.2	.25	.01	1478.
20	7.53	32.58	20	25.47	252.6	.51	.05	1478.
30	7.39	32.58	30	25.49	250.9	.76	.12	1478.
40	7.37	32.59	40	25.50	250.0	1.01	.21	1478.
50	7.04	32.64	50	25.58	242.1	1.25	.32	1477.
60	6.97	32.64	60	25.59	241.4	1.50	.45	1477.
70	6.87	32.64	70	25.60	240.2	1.74	.61	1477.
80	6.71	32.64	80	25.62	238.3	1.98	.80	1476.
90	6.24	32.66	89	25.70	231.1	2.21	1.00	1474.
100	5.95	32.67	99	25.74	227.0	2.44	1.22	1473.
110	5.73	32.68	109	25.78	223.8	2.66	1.46	1473.
120	5.59	32.73	119	25.83	218.6	2.89	1.72	1472.
130	5.24	32.89	129	26.01	202.4	3.09	1.99	1471.
140	4.86	33.03	139	26.15	188.2	3.29	2.26	1470.
150	4.59	33.19	149	26.31	173.4	3.47	2.53	1469.
160	4.53	33.28	159	26.39	166.1	3.64	2.79	1469.
170	4.45	33.40	169	26.49	156.4	3.80	3.07	1469.
180	4.38	33.53	179	26.60	146.0	3.95	3.33	1469.
190	4.39	33.61	189	26.66	140.2	4.10	3.60	1470.
200	4.41	33.69	199	26.73	134.5	4.23	3.88	1470.
210	4.37	33.73	209	26.76	131.2	4.37	4.15	1470.
220	4.28	33.76	218	26.79	128.1	4.50	4.44	1470.
230	4.19	33.77	228	26.81	126.5	4.62	4.73	1470.
240	4.11	33.79	238	26.84	124.2	4.75	5.03	1470.
250	4.06	33.81	248	26.86	122.3	4.87	5.34	1470.
260	4.04	33.84	258	26.88	120.3	4.99	5.65	1470.
270	4.00	33.84	268	26.89	119.4	5.11	5.98	1470.
280	3.98	33.85	278	26.90	118.7	5.23	6.31	1470.
290	3.97	33.86	288	26.91	118.0	5.35	6.65	1470.
300	3.93	33.87	298	26.92	116.9	5.47	7.01	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 26

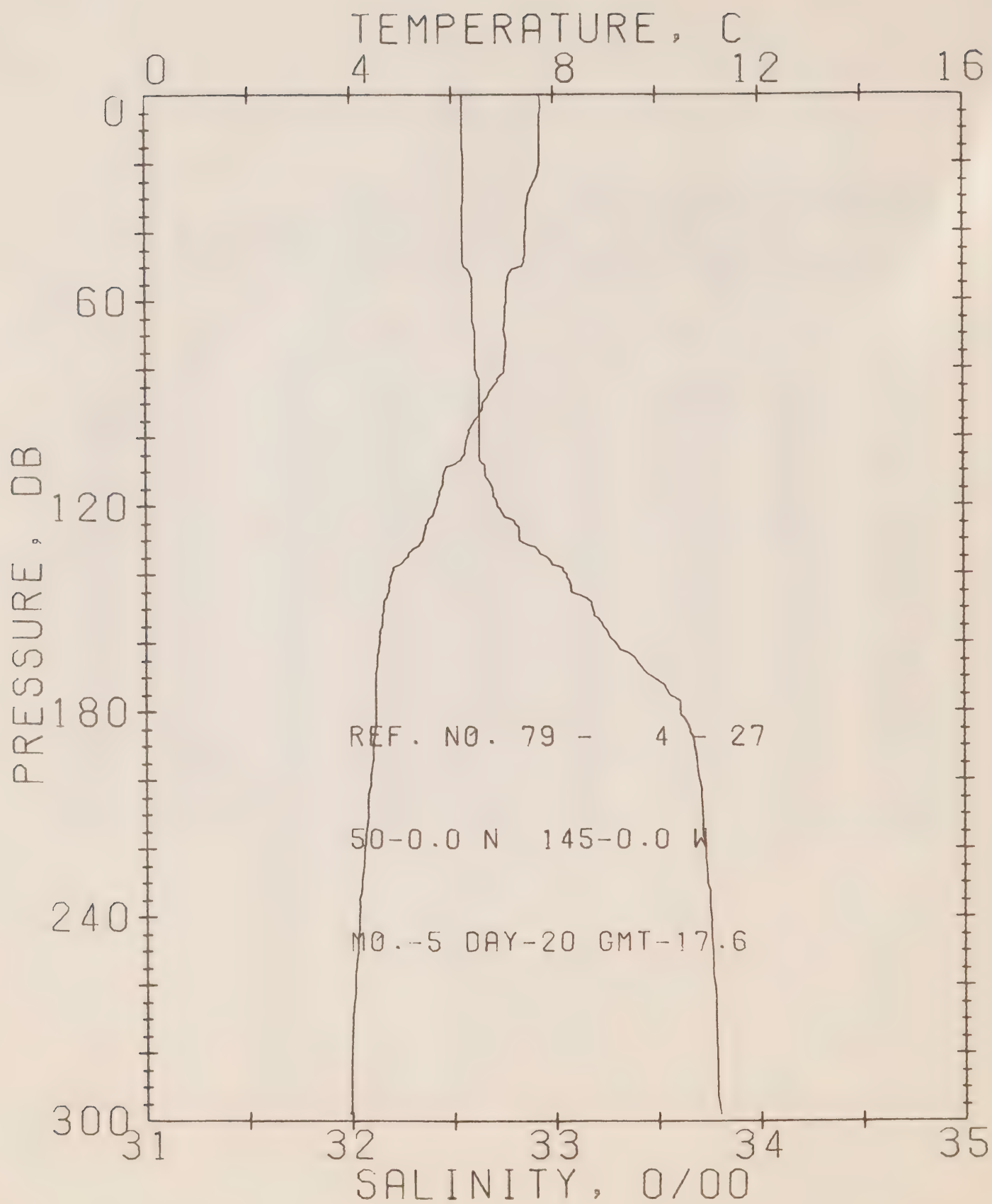
DATE 19/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 313 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

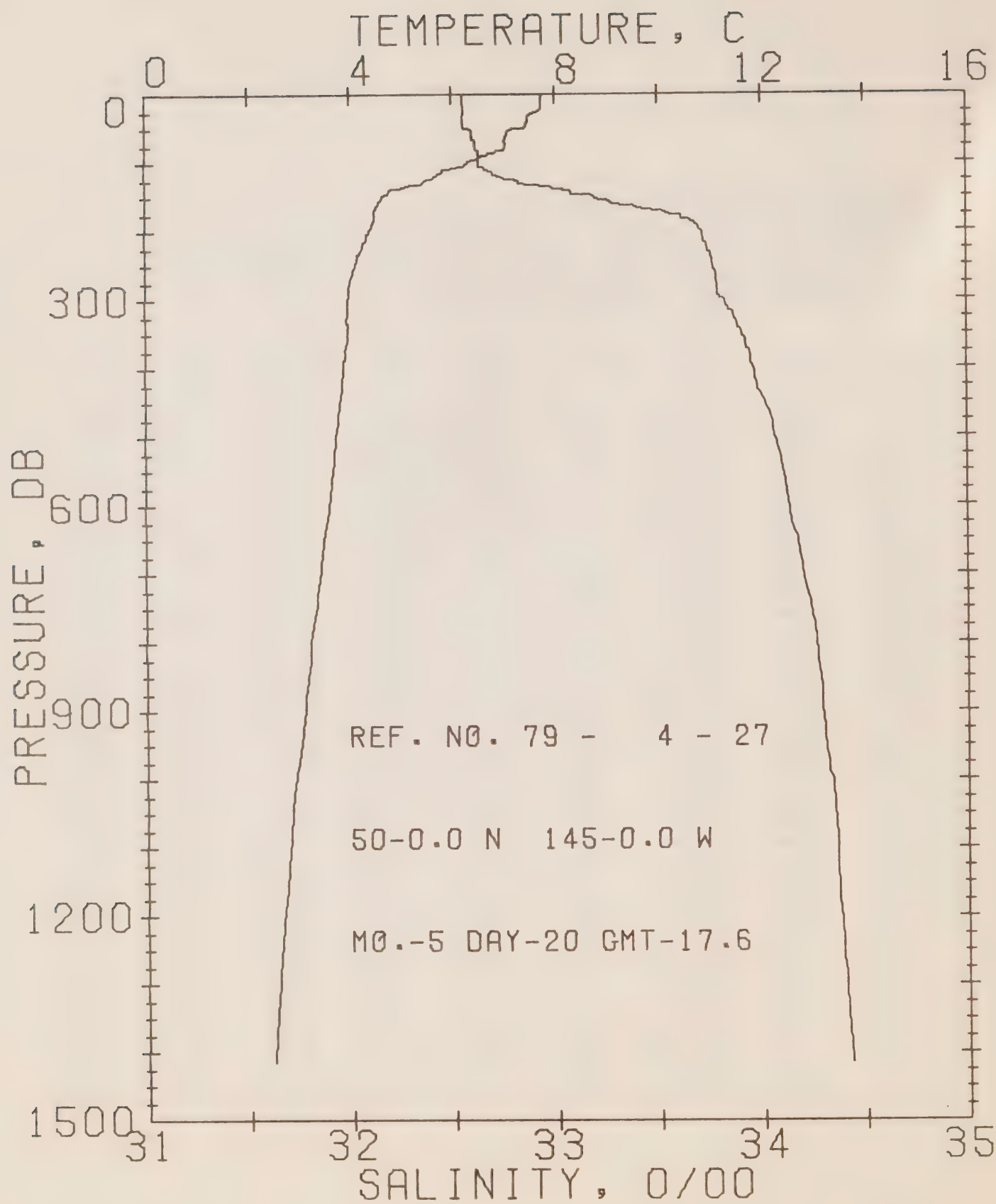
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.54	32.57	0	25.46	253.2	.00	.00	1478.
10	7.53	32.57	10	25.46	253.2	.25	.01	1478.
20	7.53	32.58	20	25.47	252.6	.51	.05	1478.
30	7.39	32.58	30	25.49	250.9	.76	.12	1478.
50	7.04	32.64	50	25.58	242.1	1.25	.32	1477.
75	6.76	32.64	75	25.62	238.9	1.86	.70	1476.
100	5.95	32.67	99	25.74	227.0	2.44	1.22	1473.
125	5.38	32.83	124	25.94	208.7	2.99	1.85	1472.
150	4.59	33.19	149	26.31	173.4	3.47	2.53	1469.
175	4.38	33.48	174	26.56	149.7	3.88	3.20	1469.
200	4.41	33.69	199	26.73	134.5	4.23	3.88	1470.
225	4.24	33.77	223	26.81	126.9	4.56	4.58	1470.
250	4.06	33.81	248	26.86	122.3	4.87	5.34	1470.
300	3.93	33.87	298	26.92	116.9	5.47	7.01	1470.
400	3.83	34.01	397	27.04	106.4	6.59	10.99	1471.
500	3.70	34.09	496	27.12	99.3	7.61	15.70	1473.
600	3.53	34.18	595	27.20	91.9	8.57	21.04	1474.
800	3.21	34.29	793	27.32	81.6	10.29	33.32	1476.
1000	2.89	34.38	990	27.42	72.8	11.83	47.37	1478.
1200	2.60	34.43	1188	27.49	67.0	13.21	62.86	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 27 DATE 20/ 5/79
 POSITION 50- .0N, 145- .0W GMT 17.6 STATION P
 RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE
 GUIDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.74	32.55	0	25.41	257.4	.00	.00	1479.
10	7.74	32.55	10	25.41	257.5	.26	.01	1479.
20	7.73	32.56	20	25.42	256.8	.51	.05	1479.
30	7.50	32.56	30	25.45	253.8	.77	.12	1478.
40	7.45	32.55	40	25.45	254.1	1.02	.21	1478.
50	7.38	32.56	50	25.47	252.5	1.28	.32	1478.
60	7.06	32.60	60	25.55	245.5	1.52	.46	1477.
70	7.04	32.61	70	25.56	244.6	1.77	.63	1477.
80	7.02	32.61	80	25.56	244.5	2.01	.81	1477.
90	6.60	32.63	89	25.63	237.8	2.26	1.02	1476.
100	6.30	32.63	99	25.67	234.2	2.49	1.25	1475.
110	5.84	32.66	109	25.75	226.6	2.72	1.50	1473.
120	5.69	32.72	119	25.81	220.5	2.95	1.76	1473.
130	5.41	32.83	129	25.93	209.1	3.16	2.03	1472.
140	4.81	33.06	139	26.18	185.4	3.36	2.30	1470.
150	4.63	33.18	149	26.30	174.2	3.54	2.57	1470.
160	4.56	33.30	159	26.40	164.9	3.71	2.84	1470.
170	4.49	33.48	169	26.55	150.8	3.86	3.10	1470.
180	4.49	33.61	179	26.65	141.2	4.01	3.36	1470.
190	4.44	33.68	189	26.71	135.5	4.15	3.62	1470.
200	4.38	33.70	199	26.74	133.2	4.28	3.89	1470.
210	4.31	33.72	209	26.76	131.4	4.41	4.16	1470.
220	4.25	33.73	218	26.77	130.0	4.54	4.45	1470.
230	4.19	33.74	228	26.79	128.7	4.67	4.75	1470.
240	4.14	33.76	238	26.81	126.8	4.80	5.05	1470.
250	4.11	33.77	248	26.82	126.0	4.93	5.37	1470.
260	4.04	33.77	258	26.83	124.8	5.05	5.69	1470.
270	4.00	33.78	268	26.84	124.1	5.18	6.03	1470.
280	3.99	33.79	278	26.85	123.5	5.30	6.38	1470.
290	3.98	33.79	288	26.85	123.3	5.42	6.73	1470.
300	3.95	33.81	298	26.87	121.3	5.55	7.10	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 27

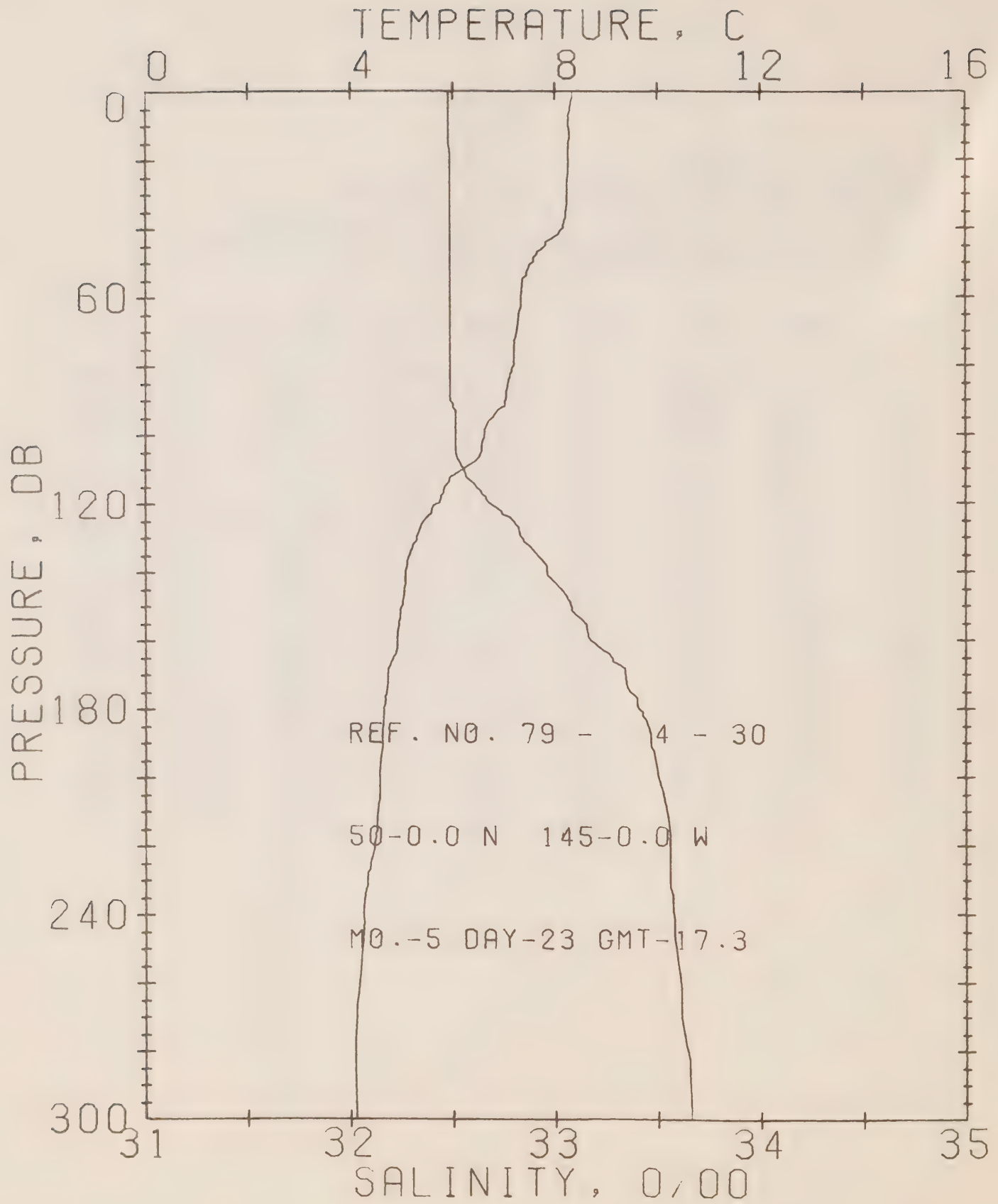
DATE 20/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.6 STATION P

RESULTS OF STP CAST 262 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.74	32.55	0	25.41	257.4	.00	.00	1479.
10	7.74	32.55	10	25.41	257.5	.26	.01	1479.
20	7.73	32.56	20	25.42	256.8	.51	.05	1479.
30	7.50	32.56	30	25.45	253.8	.77	.12	1478.
50	7.38	32.56	50	25.47	252.5	1.28	.32	1478.
75	7.04	32.61	75	25.56	244.7	1.89	.72	1477.
100	6.30	32.63	99	25.67	234.2	2.49	1.25	1475.
125	5.48	32.81	124	25.91	211.4	3.06	1.89	1472.
150	4.63	33.18	149	26.30	174.2	3.54	2.57	1470.
175	4.49	33.56	174	26.61	144.9	3.94	3.23	1470.
200	4.38	33.70	199	26.74	133.2	4.28	3.89	1470.
225	4.22	33.73	223	26.78	129.4	4.61	4.60	1470.
250	4.11	33.77	248	26.82	126.0	4.93	5.37	1470.
300	3.95	33.81	298	26.87	121.3	5.55	7.10	1470.
400	3.86	33.96	397	27.00	110.1	6.70	11.20	1471.
500	3.72	34.06	496	27.09	102.0	7.76	16.06	1473.
600	3.58	34.13	595	27.16	96.3	8.75	21.60	1474.
800	3.21	34.26	793	27.30	83.9	10.55	34.38	1476.
1000	2.90	34.34	990	27.39	75.9	12.16	49.13	1478.
1200	2.66	34.38	1188	27.44	71.7	13.63	65.66	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 30

DATE 23/ 5/79

POSITION 50- .0N, 145- .0W

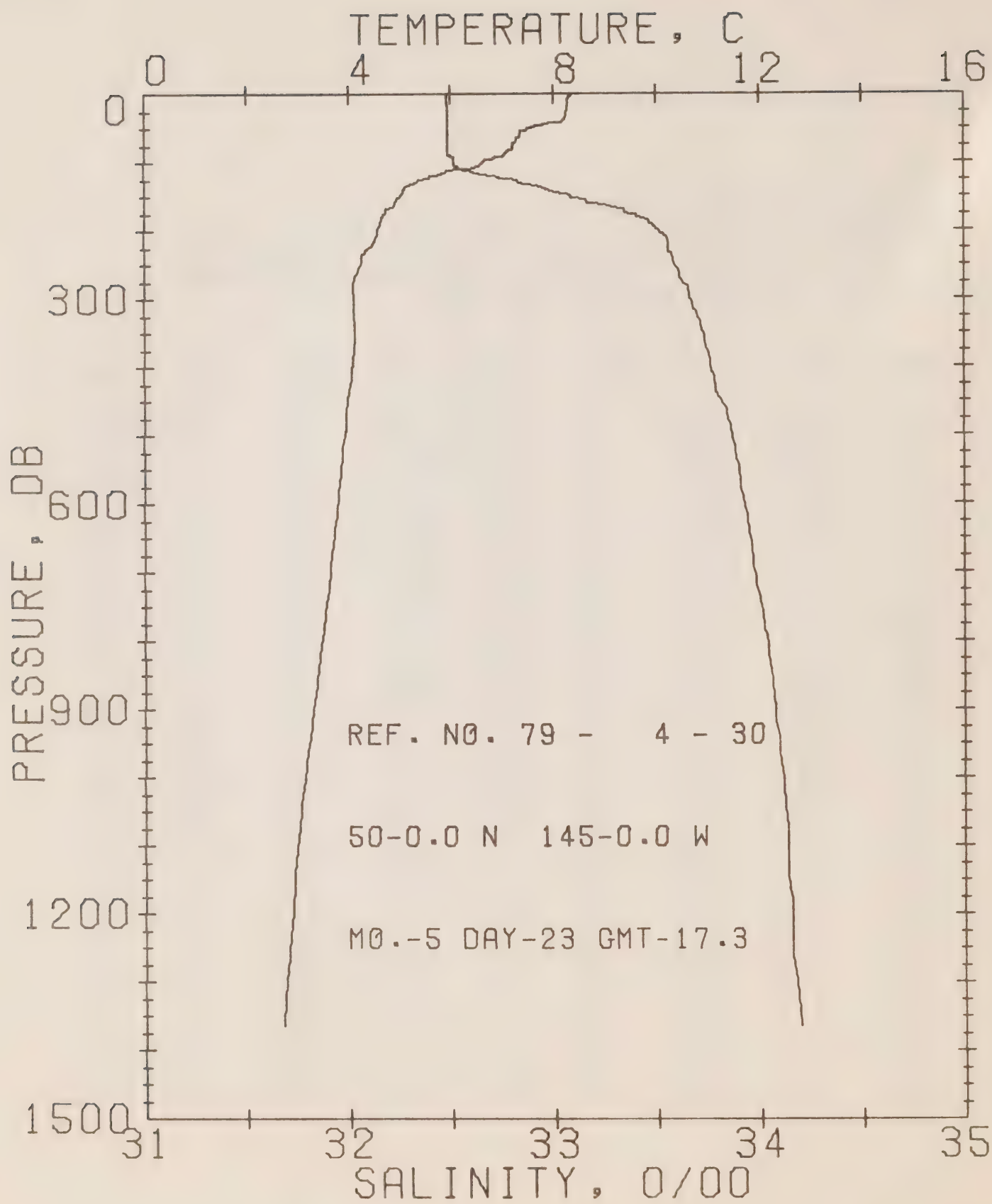
GMT 17.3

STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.36	32.48	0	25.27	271.2	.00	.00	1481.
10	8.28	32.48	10	25.28	270.2	.27	.01	1481.
20	8.26	32.49	20	25.29	269.3	.54	.06	1481.
30	8.25	32.49	30	25.29	269.3	.81	.12	1481.
40	8.15	32.49	40	25.31	268.1	1.08	.22	1481.
50	7.56	32.49	50	25.39	260.1	1.34	.34	1479.
60	7.34	32.49	60	25.42	257.3	1.60	.49	1478.
70	7.25	32.49	70	25.43	256.3	1.86	.66	1478.
80	7.19	32.49	80	25.44	255.6	2.11	.85	1478.
90	7.03	32.49	89	25.46	253.7	2.37	1.07	1477.
100	6.62	32.51	99	25.53	247.1	2.62	1.31	1476.
110	6.21	32.55	109	25.62	239.2	2.86	1.58	1474.
120	5.72	32.68	119	25.78	223.8	3.09	1.85	1473.
130	5.29	32.84	129	25.96	207.0	3.31	2.12	1471.
140	5.08	32.96	139	26.07	195.8	3.51	2.39	1471.
150	5.01	33.08	149	26.18	186.2	3.70	2.68	1471.
160	4.91	33.17	159	26.26	178.4	3.88	2.96	1471.
170	4.72	33.34	169	26.42	163.5	4.05	3.25	1470.
180	4.65	33.41	179	26.48	157.8	4.21	3.53	1470.
190	4.61	33.47	189	26.53	153.0	4.36	3.83	1470.
200	4.57	33.50	199	26.56	150.1	4.52	4.13	1470.
210	4.53	33.54	209	26.60	146.8	4.66	4.44	1471.
220	4.45	33.56	218	26.62	144.8	4.81	4.76	1470.
230	4.32	33.56	228	26.63	143.6	4.95	5.09	1470.
240	4.25	33.57	238	26.65	141.7	5.10	5.43	1470.
250	4.21	33.59	248	26.67	140.5	5.24	5.78	1470.
260	4.16	33.61	258	26.69	138.6	5.38	6.14	1470.
270	4.10	33.61	268	26.69	137.9	5.52	6.52	1470.
280	4.09	33.64	278	26.72	135.4	5.65	6.90	1470.
290	4.09	33.65	288	26.73	134.7	5.79	7.29	1470.
300	4.10	33.66	298	26.73	134.4	5.92	7.70	1470.



OFFSHORE OCEANOGRAPH GROUP

REFERENCE NO. 79- 4- 30

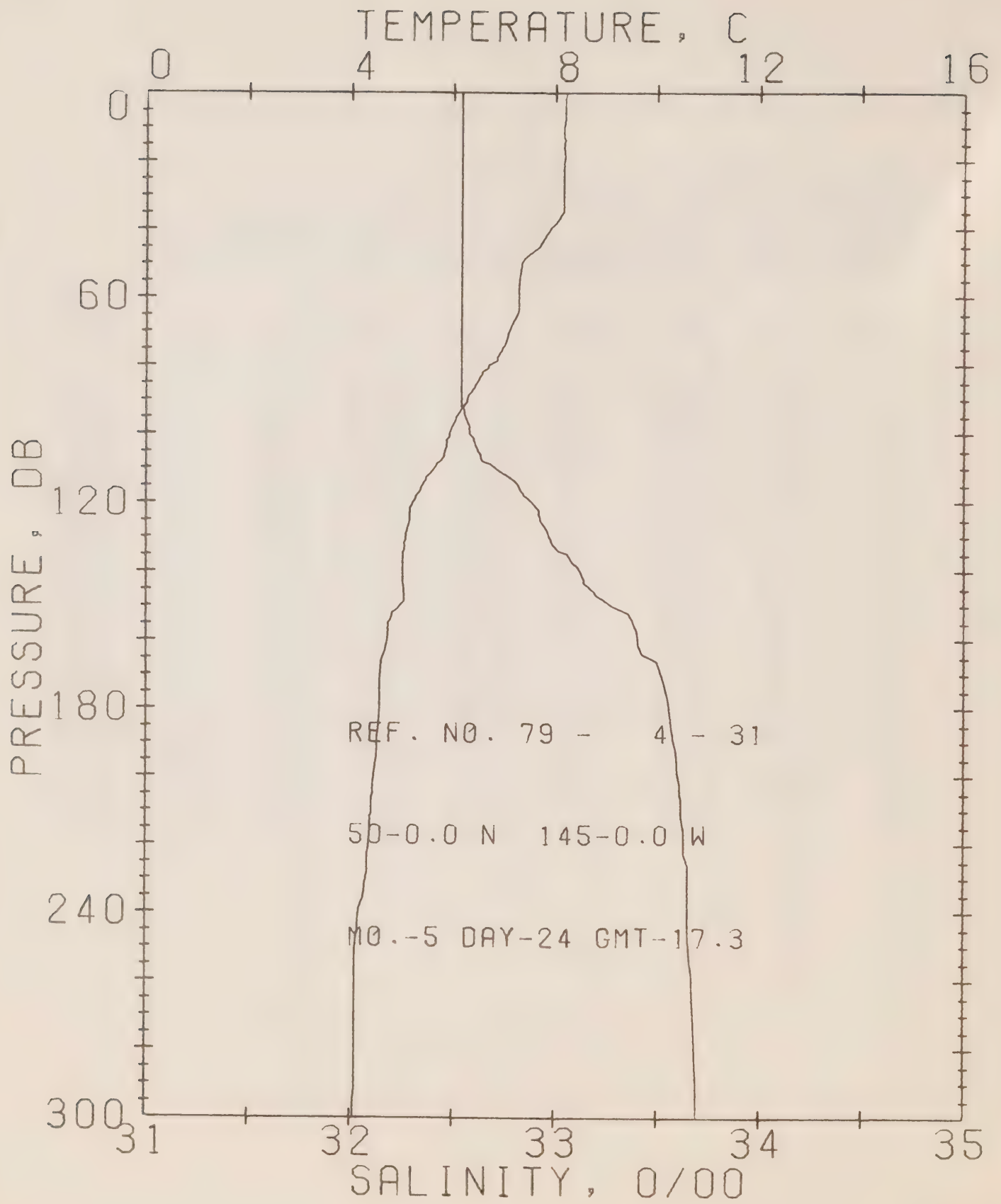
DATE 23/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 283 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.36	32.48	0	25.27	271.2	.00	.00	1481.
10	8.28	32.48	10	25.28	270.2	.27	.01	1481.
20	8.26	32.49	20	25.29	269.3	.54	.06	1481.
30	8.25	32.49	30	25.29	269.3	.81	.12	1481.
50	7.56	32.49	50	25.39	260.1	1.34	.34	1479.
75	7.21	32.49	75	25.44	255.8	1.99	.75	1478.
100	6.62	32.51	99	25.53	247.1	2.62	1.31	1476.
125	5.44	32.80	124	25.90	212.1	3.20	1.98	1472.
150	5.01	33.08	149	26.18	186.2	3.70	2.68	1471.
175	4.70	33.37	174	26.44	161.3	4.13	3.39	1470.
200	4.57	33.50	199	26.56	150.1	4.52	4.13	1470.
225	4.38	33.56	223	26.63	144.1	4.88	4.92	1470.
250	4.21	33.59	248	26.67	140.5	5.24	5.78	1470.
300	4.10	33.66	298	26.73	134.4	5.92	7.70	1470.
400	4.06	33.76	397	26.82	127.3	7.23	12.34	1472.
500	3.92	33.87	496	26.92	118.5	8.45	17.97	1473.
600	3.78	33.93	595	26.98	113.5	9.61	24.46	1474.
800	3.46	34.04	793	27.10	103.3	11.79	39.93	1476.
1000	3.12	34.11	991	27.19	95.4	13.77	58.15	1478.
1200	2.87	34.15	1188	27.24	90.8	15.63	78.97	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 31

DATE 24/ 5/79

POSITION 50- .0N, 145- .0W

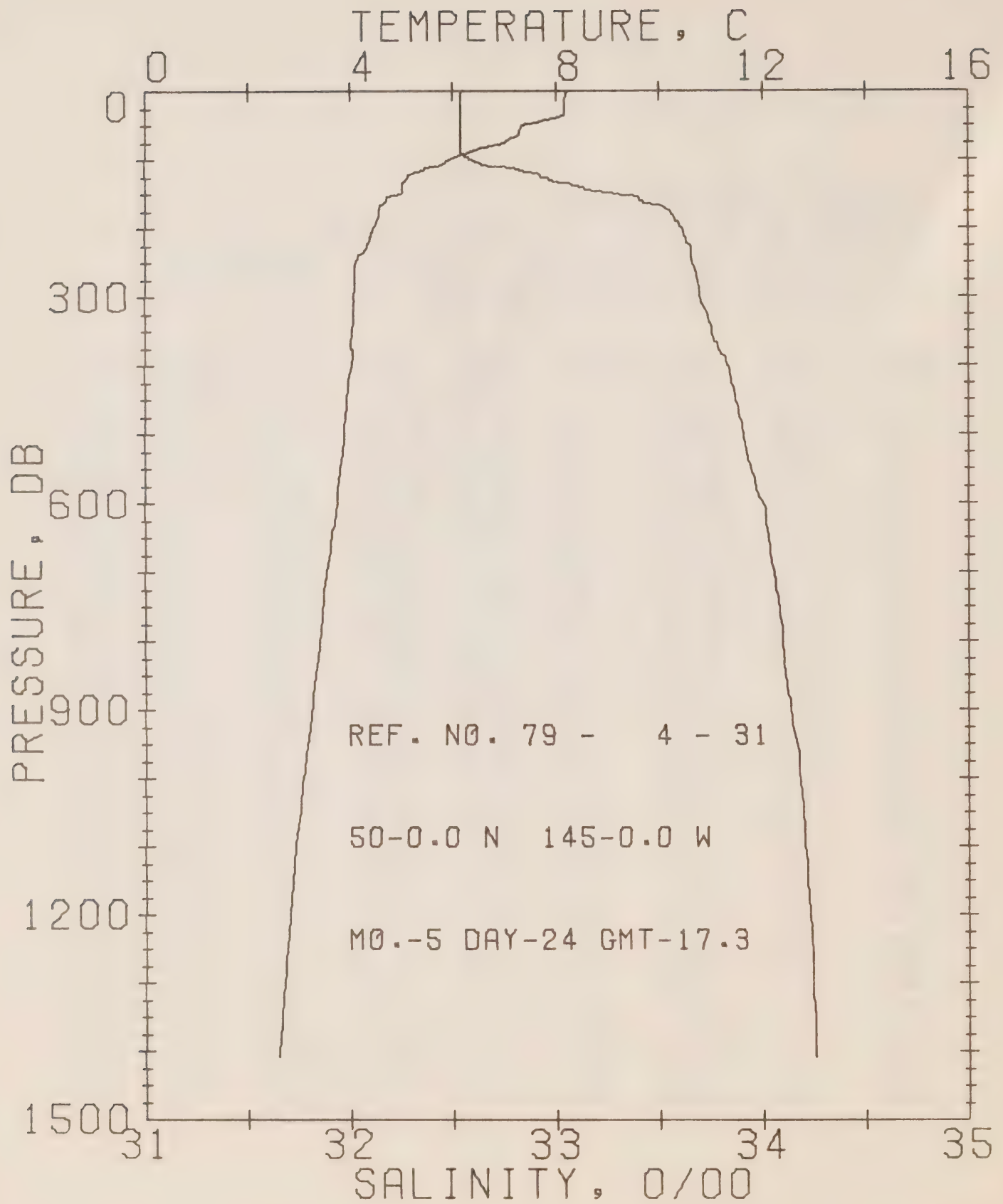
GMT 17.3

STATION P

RESULTS OF STP CAST 145 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.22	32.54	0	25.34	264.7	.00	.00	1481.
10	8.17	32.54	10	25.34	264.2	.26	.01	1481.
20	8.17	32.54	20	25.34	264.4	.53	.05	1481.
30	8.17	32.54	30	25.34	264.5	.79	.12	1481.
40	7.90	32.54	40	25.38	260.9	1.06	.22	1480.
50	7.32	32.54	50	25.46	253.2	1.31	.33	1478.
60	7.28	32.54	60	25.47	252.9	1.57	.48	1478.
70	7.10	32.54	70	25.49	250.6	1.82	.64	1477.
80	6.70	32.54	80	25.55	245.6	2.07	.83	1476.
90	6.28	32.54	89	25.60	240.6	2.31	1.04	1474.
100	5.92	32.58	99	25.68	233.4	2.55	1.27	1473.
110	5.62	32.70	109	25.81	220.7	2.78	1.52	1472.
120	5.22	32.89	119	26.00	202.7	2.99	1.76	1471.
130	5.07	32.97	129	26.09	194.5	3.19	2.02	1471.
140	5.02	33.12	139	26.21	183.2	3.37	2.28	1471.
150	4.95	33.28	149	26.34	170.5	3.55	2.54	1471.
160	4.70	33.41	159	26.47	158.2	3.71	2.79	1470.
170	4.57	33.52	169	26.57	148.7	3.87	3.05	1470.
180	4.56	33.56	179	26.61	145.5	4.01	3.31	1470.
190	4.52	33.58	189	26.63	143.5	4.16	3.59	1470.
200	4.45	33.60	199	26.65	141.4	4.30	3.87	1470.
210	4.40	33.62	209	26.67	139.7	4.44	4.16	1470.
220	4.35	33.63	218	26.68	138.6	4.58	4.47	1470.
230	4.29	33.65	228	26.71	136.5	4.72	4.78	1470.
240	4.16	33.65	238	26.72	135.2	4.85	5.11	1470.
250	4.10	33.66	248	26.73	134.2	4.99	5.45	1470.
260	4.07	33.67	258	26.75	132.9	5.12	5.79	1470.
270	4.07	33.68	268	26.75	132.3	5.26	6.15	1470.
280	4.07	33.68	278	26.76	132.0	5.39	6.52	1470.
290	4.07	33.69	288	26.76	131.7	5.52	6.90	1470.
300	4.06	33.69	298	26.76	131.7	5.65	7.30	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 31

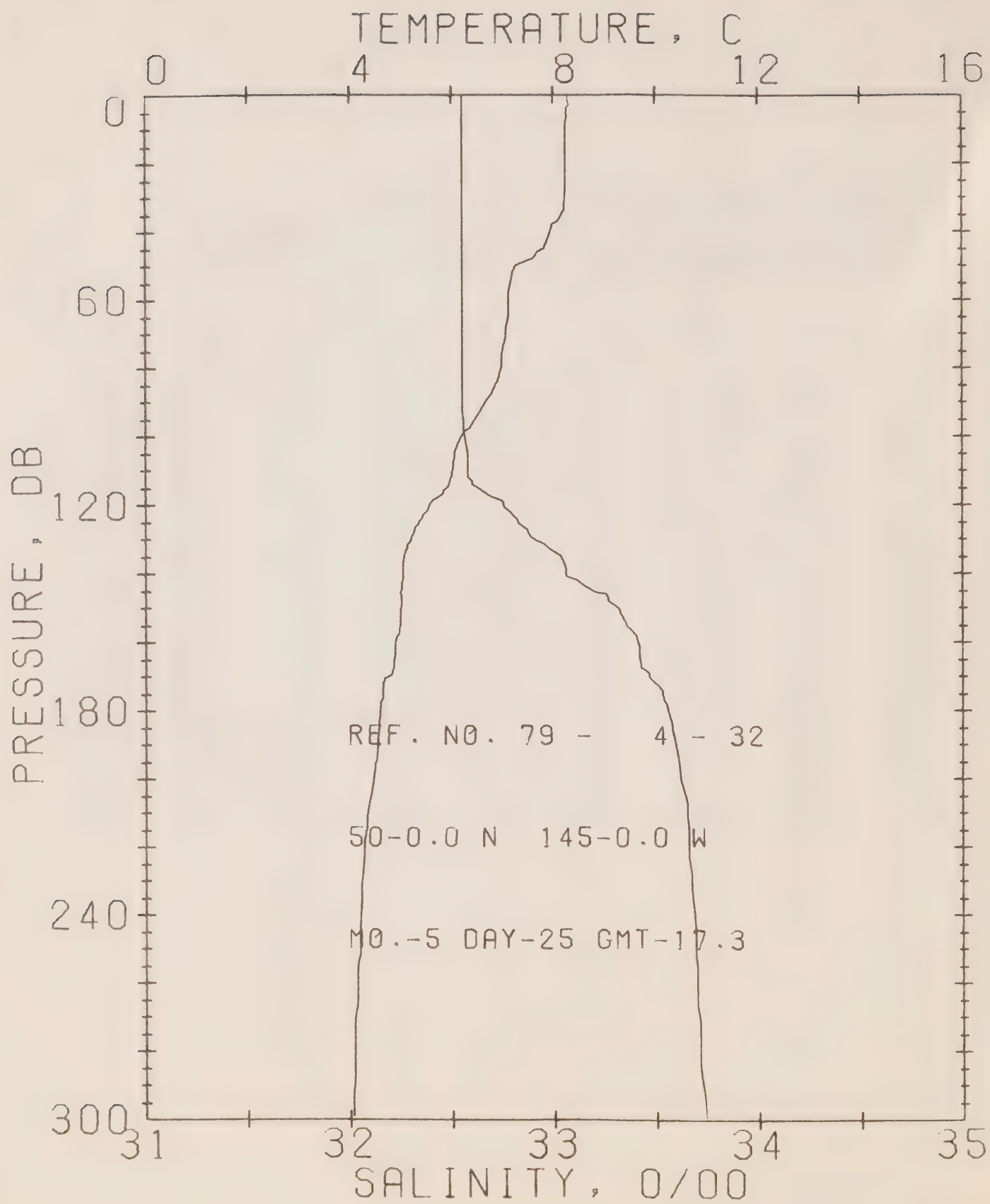
DATE 24/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 246 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.22	32.54	0	25.34	264.7	.00	.00	1481.
10	8.17	32.54	10	25.34	264.2	.26	.01	1481.
20	8.17	32.54	20	25.34	264.4	.53	.05	1481.
30	8.17	32.54	30	25.34	264.5	.79	.12	1481.
50	7.32	32.54	50	25.46	253.2	1.31	.33	1478.
75	6.97	32.54	75	25.51	249.0	1.94	.73	1477.
100	5.92	32.58	99	25.68	233.4	2.55	1.27	1473.
125	5.14	32.93	124	26.04	198.6	3.09	1.89	1471.
150	4.95	33.28	149	26.34	170.5	3.55	2.54	1471.
175	4.56	33.54	174	26.59	147.0	3.94	3.18	1470.
200	4.45	33.60	199	26.65	141.4	4.30	3.87	1470.
225	4.32	33.64	223	26.70	137.3	4.65	4.63	1470.
250	4.10	33.66	248	26.73	134.2	4.99	5.45	1470.
300	4.06	33.69	298	26.76	131.7	5.65	7.30	1470.
400	4.02	33.83	397	26.88	121.6	6.92	11.82	1472.
500	3.87	33.91	496	26.95	115.0	8.10	17.23	1473.
600	3.74	34.00	595	27.04	107.5	9.22	23.49	1474.
800	3.39	34.09	793	27.15	98.5	11.27	38.09	1476.
1000	3.06	34.18	990	27.24	89.8	13.15	55.35	1478.
1200	2.80	34.23	1188	27.31	84.5	14.89	74.84	1480.



OFFSHORE OCEANOGRAPHY GROUP

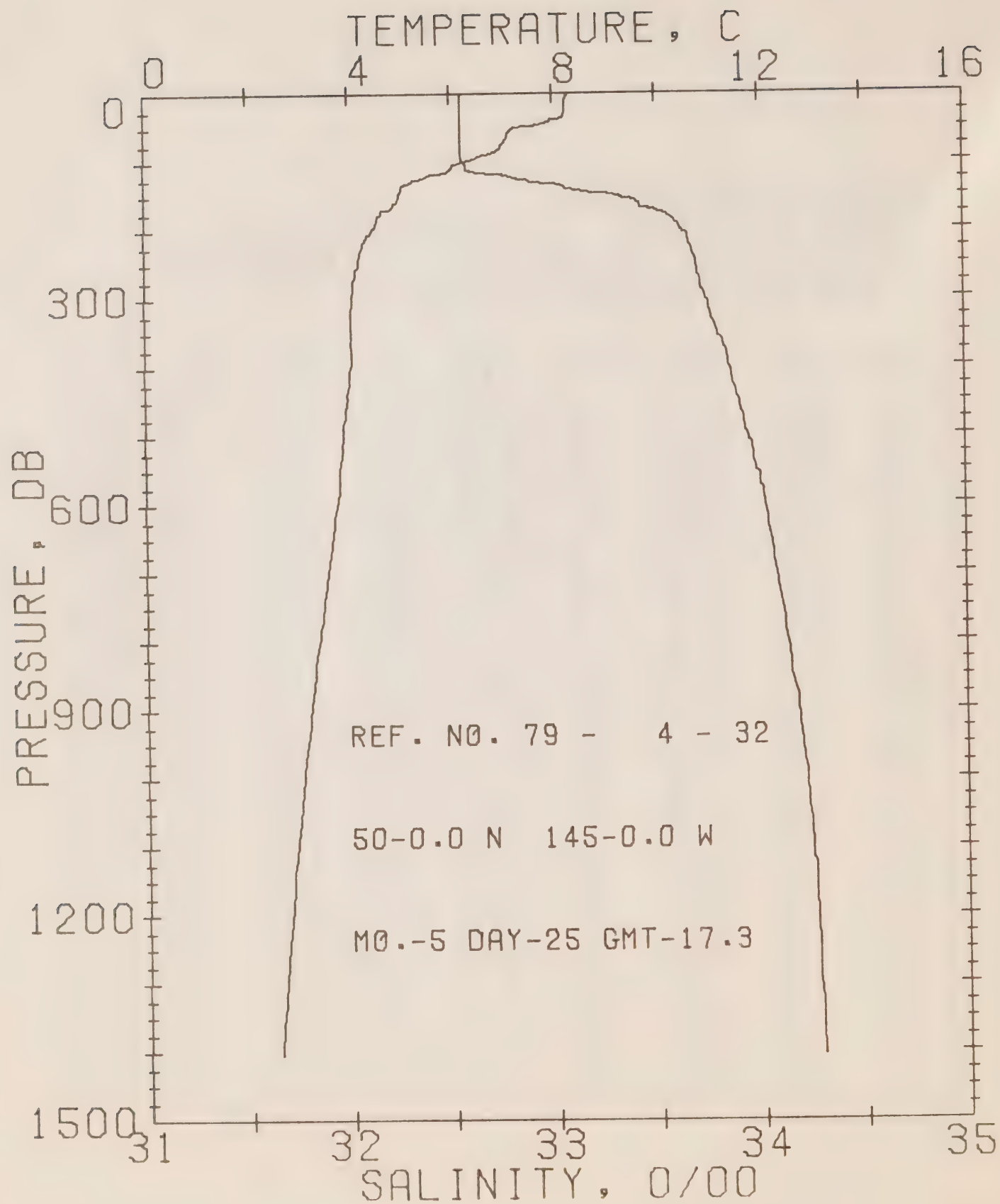
REFERENCE NO. 79- 4- 32

DATE 25/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.29	32.55	0	25.33	265.0	.00	.00	1481.
10	8.24	32.55	10	25.34	264.4	.26	.01	1481.
20	8.24	32.55	20	25.34	264.6	.53	.05	1481.
30	8.23	32.55	30	25.34	264.5	.79	.12	1481.
40	7.94	32.55	40	25.38	260.7	1.06	.22	1480.
50	7.24	32.55	50	25.48	251.4	1.31	.33	1478.
60	7.13	32.55	60	25.50	250.1	1.57	.47	1477.
70	7.06	32.55	70	25.51	249.4	1.82	.64	1477.
80	6.98	32.55	80	25.52	248.5	2.06	.83	1477.
90	6.68	32.55	89	25.56	244.8	2.31	1.04	1476.
100	6.20	32.56	99	25.63	238.1	2.55	1.28	1474.
110	6.02	32.58	109	25.66	234.7	2.79	1.53	1474.
120	5.58	32.75	119	25.85	216.9	3.02	1.80	1472.
130	5.20	32.91	129	26.02	200.8	3.23	2.06	1471.
140	5.03	33.06	139	26.16	187.8	3.42	2.33	1471.
150	5.00	33.32	149	26.37	168.1	3.59	2.59	1471.
160	4.91	33.41	159	26.45	160.0	3.76	2.85	1471.
170	4.80	33.47	169	26.51	154.9	3.92	3.11	1471.
180	4.58	33.56	179	26.60	145.9	4.07	3.38	1470.
190	4.54	33.59	189	26.64	142.9	4.21	3.65	1470.
200	4.45	33.62	199	26.67	140.2	4.35	3.93	1470.
210	4.34	33.65	209	26.70	136.8	4.49	4.22	1470.
220	4.27	33.66	218	26.72	135.5	4.63	4.52	1470.
230	4.22	33.67	228	26.73	134.3	4.76	4.83	1470.
240	4.19	33.68	238	26.74	133.0	4.89	5.15	1470.
250	4.18	33.69	248	26.75	132.5	5.03	5.48	1470.
260	4.13	33.70	258	26.76	131.4	5.16	5.82	1470.
270	4.10	33.71	268	26.77	130.5	5.29	6.18	1470.
280	4.07	33.71	278	26.78	130.2	5.42	6.54	1470.
290	4.06	33.72	288	26.79	129.1	5.55	6.92	1470.
300	4.05	33.74	298	26.80	127.9	5.68	7.31	1470.



OFFSHORE OCEANOGRAPH, GROUP

REFERENCE NO. 79- 4- 32

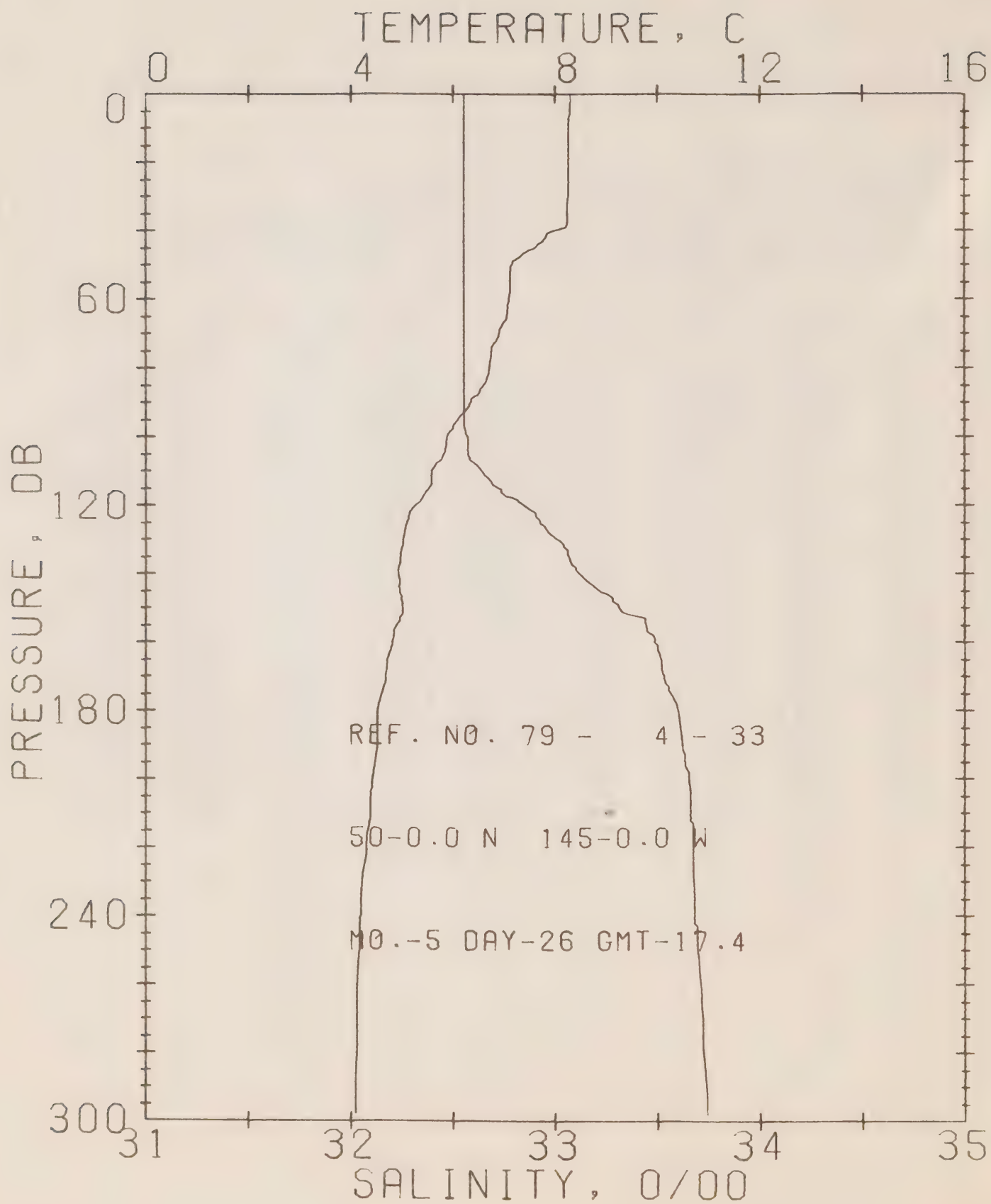
DATE 25/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 254 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.29	32.55	0	25.33	265.0	.00	.00	1481.
10	8.24	32.55	10	25.34	264.4	.26	.01	1481.
20	8.24	32.55	20	25.34	264.6	.53	.05	1481.
30	8.23	32.55	30	25.34	264.5	.79	.12	1481.
50	7.24	32.55	50	25.48	251.4	1.31	.33	1478.
75	7.00	32.55	75	25.51	248.7	1.94	.73	1477.
100	6.20	32.56	99	25.63	238.1	2.55	1.28	1474.
125	5.37	32.83	124	25.94	208.6	3.12	1.93	1472.
150	5.00	33.32	149	26.37	168.1	3.59	2.59	1471.
175	4.64	33.53	174	26.57	148.7	3.99	3.25	1470.
200	4.45	33.62	199	26.67	140.2	4.35	3.93	1470.
225	4.25	33.66	223	26.72	135.0	4.69	4.67	1470.
250	4.18	33.69	248	26.75	132.5	5.03	5.48	1470.
300	4.05	33.74	298	26.80	127.9	5.68	7.31	1470.
400	4.02	33.85	397	26.90	119.9	6.92	11.71	1472.
500	3.87	33.94	496	26.98	112.6	8.08	17.04	1473.
600	3.74	34.02	595	27.06	106.1	9.17	23.15	1474.
800	3.37	34.12	793	27.18	95.7	11.19	37.51	1476.
1000	3.02	34.21	990	27.28	86.8	13.01	54.18	1478.
1200	2.78	34.26	1188	27.34	81.8	14.69	73.02	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 33

DATE 26/ 5/79

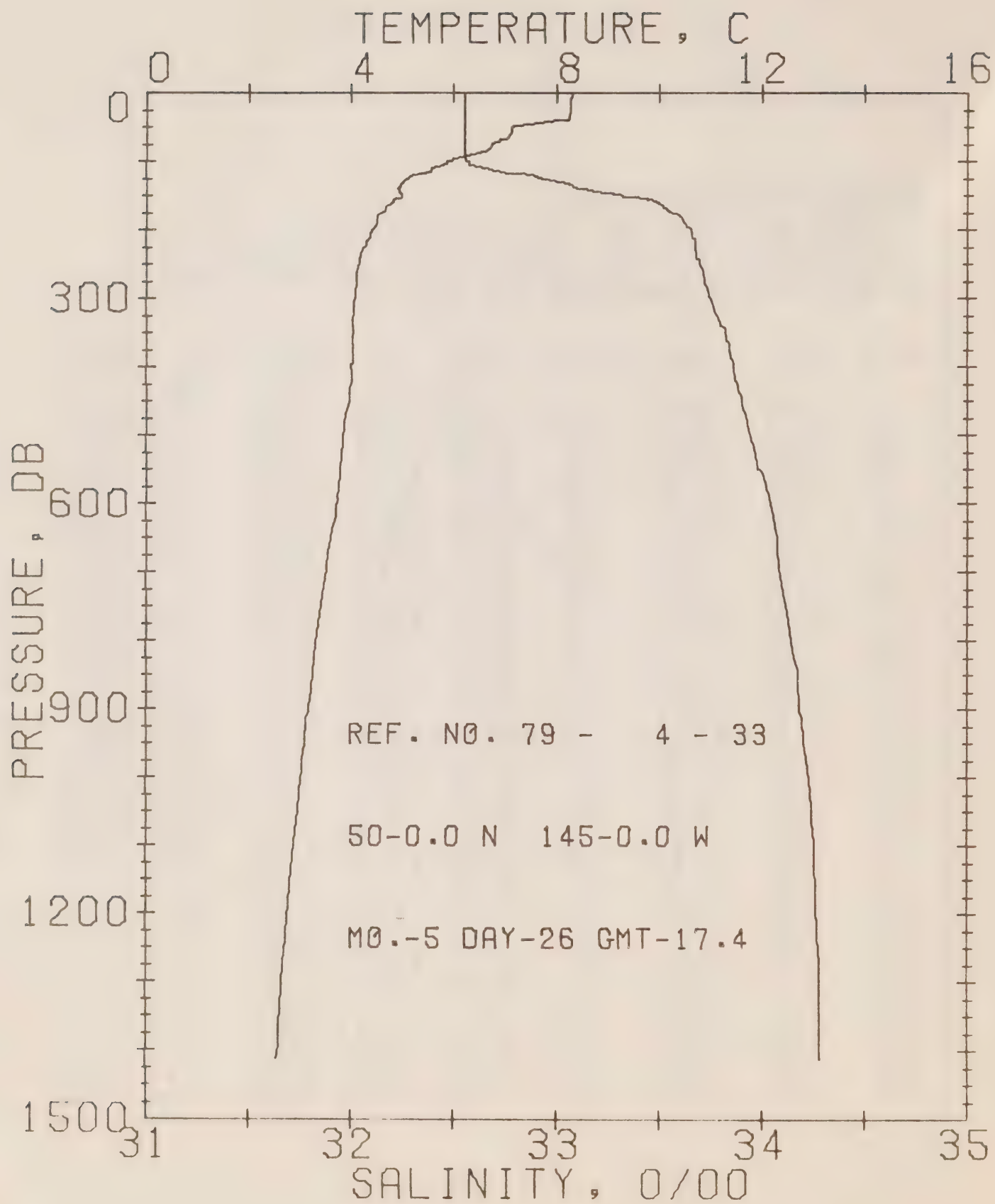
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.30	32.55	0	25.33	265.1	.00	.00	1481.
10	8.27	32.55	10	25.34	264.8	.27	.01	1481.
20	8.26	32.55	20	25.34	264.9	.53	.05	1481.
30	8.26	32.55	30	25.34	265.0	.79	.12	1481.
40	7.98	32.55	40	25.38	261.2	1.06	.22	1480.
50	7.15	32.55	50	25.49	250.3	1.31	.33	1477.
60	7.09	32.55	60	25.50	249.6	1.56	.47	1477.
70	6.90	32.55	70	25.53	247.2	1.81	.64	1477.
80	6.70	32.55	80	25.55	244.9	2.06	.83	1476.
90	6.36	32.55	89	25.60	240.8	2.30	1.04	1475.
100	5.86	32.57	99	25.68	233.4	2.54	1.27	1473.
110	5.56	32.64	109	25.77	224.8	2.77	1.51	1472.
120	5.28	32.84	119	25.96	206.5	2.99	1.77	1471.
130	5.02	33.01	129	26.12	191.3	3.19	2.02	1471.
140	4.93	33.11	139	26.21	182.6	3.37	2.28	1470.
150	5.00	33.32	149	26.37	168.2	3.55	2.54	1471.
160	4.81	33.49	159	26.52	153.4	3.71	2.79	1471.
170	4.67	33.53	169	26.57	149.0	3.86	3.04	1470.
180	4.52	33.60	179	26.64	142.2	4.00	3.30	1470.
190	4.50	33.62	189	26.66	140.7	4.15	3.57	1470.
200	4.42	33.65	199	26.69	137.6	4.28	3.84	1470.
210	4.37	33.66	209	26.71	136.4	4.42	4.13	1470.
220	4.29	33.67	218	26.72	134.9	4.56	4.43	1470.
230	4.21	33.67	228	26.73	134.0	4.69	4.74	1470.
240	4.18	33.68	238	26.74	133.2	4.82	5.05	1470.
250	4.15	33.69	248	26.75	132.2	4.96	5.39	1470.
260	4.12	33.71	258	26.77	130.7	5.09	5.73	1470.
270	4.11	33.72	268	26.78	129.7	5.22	6.08	1470.
280	4.10	33.72	278	26.78	129.6	5.35	6.44	1470.
290	4.09	33.73	288	26.79	128.6	5.48	6.82	1470.
300	4.07	33.74	298	26.80	127.8	5.61	7.20	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 33

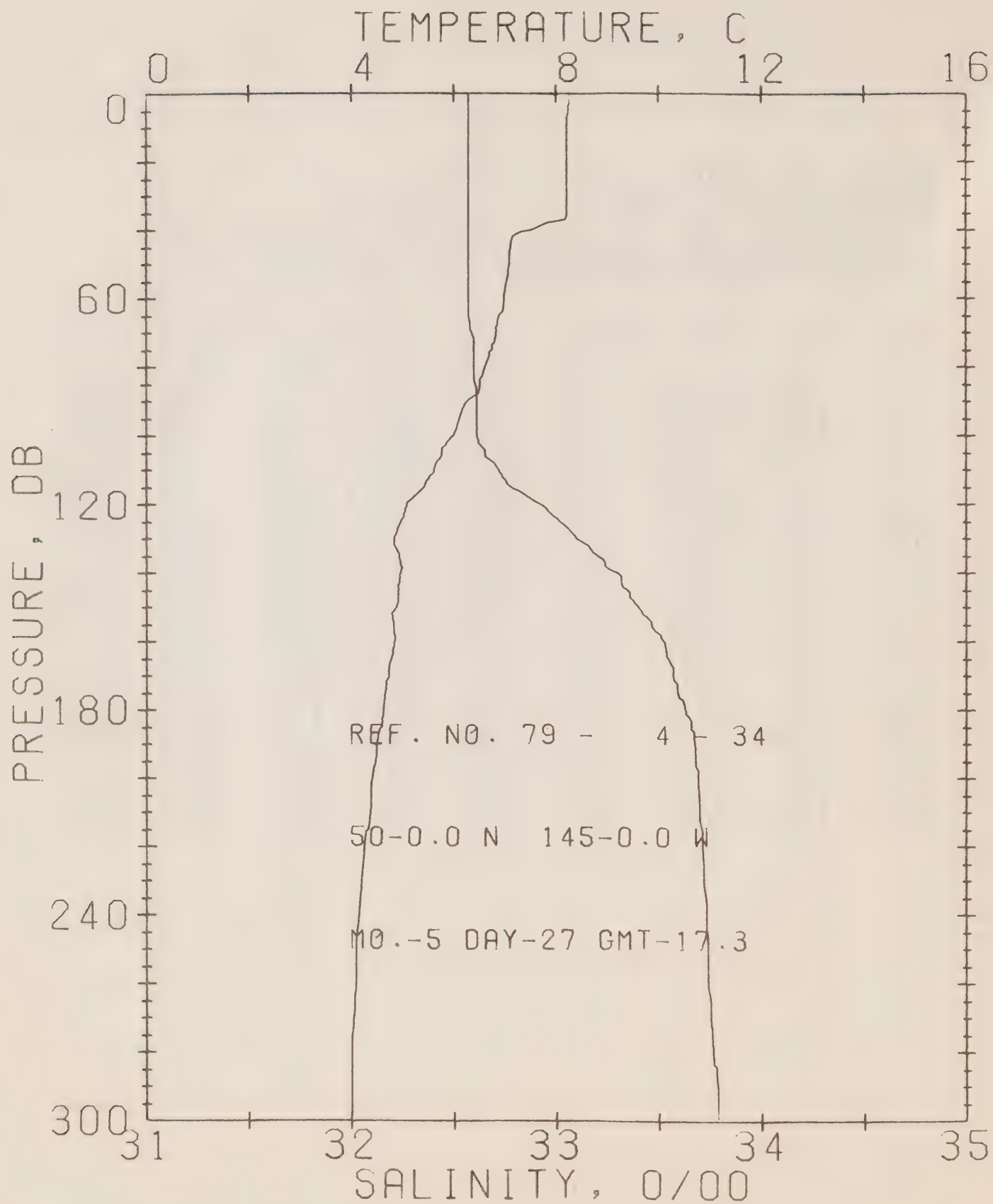
DATE 26/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 257 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.30	32.55	0	25.33	265.1	.00	.00	1481.
10	8.27	32.55	10	25.34	264.8	.27	.01	1481.
20	8.26	32.55	20	25.34	264.9	.53	.05	1481.
30	8.26	32.55	30	25.34	265.0	.79	.12	1481.
50	7.15	32.55	50	25.49	250.3	1.31	.33	1477.
75	6.75	32.55	75	25.55	245.4	1.94	.73	1476.
100	5.86	32.57	99	25.68	233.4	2.54	1.27	1473.
125	5.10	32.93	124	26.05	198.1	3.09	1.89	1471.
150	5.00	33.32	149	26.37	168.2	3.55	2.54	1471.
175	4.59	33.56	174	26.60	146.0	3.93	3.17	1470.
200	4.42	33.65	199	26.69	137.6	4.28	3.84	1470.
225	4.26	33.67	223	26.73	134.7	4.62	4.58	1470.
250	4.15	33.69	248	26.75	132.2	4.96	5.39	1470.
300	4.07	33.74	298	26.80	127.8	5.61	7.20	1470.
400	4.01	33.86	397	26.90	119.3	6.83	11.57	1472.
500	3.84	33.94	496	26.99	112.0	7.99	16.89	1473.
600	3.73	34.04	595	27.07	104.4	9.08	22.96	1474.
800	3.32	34.14	793	27.19	94.2	11.06	37.08	1476.
1000	3.01	34.22	990	27.29	85.8	12.86	53.53	1478.
1200	2.76	34.26	1188	27.34	81.2	14.52	72.18	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 34

DATE 27/ 5/79

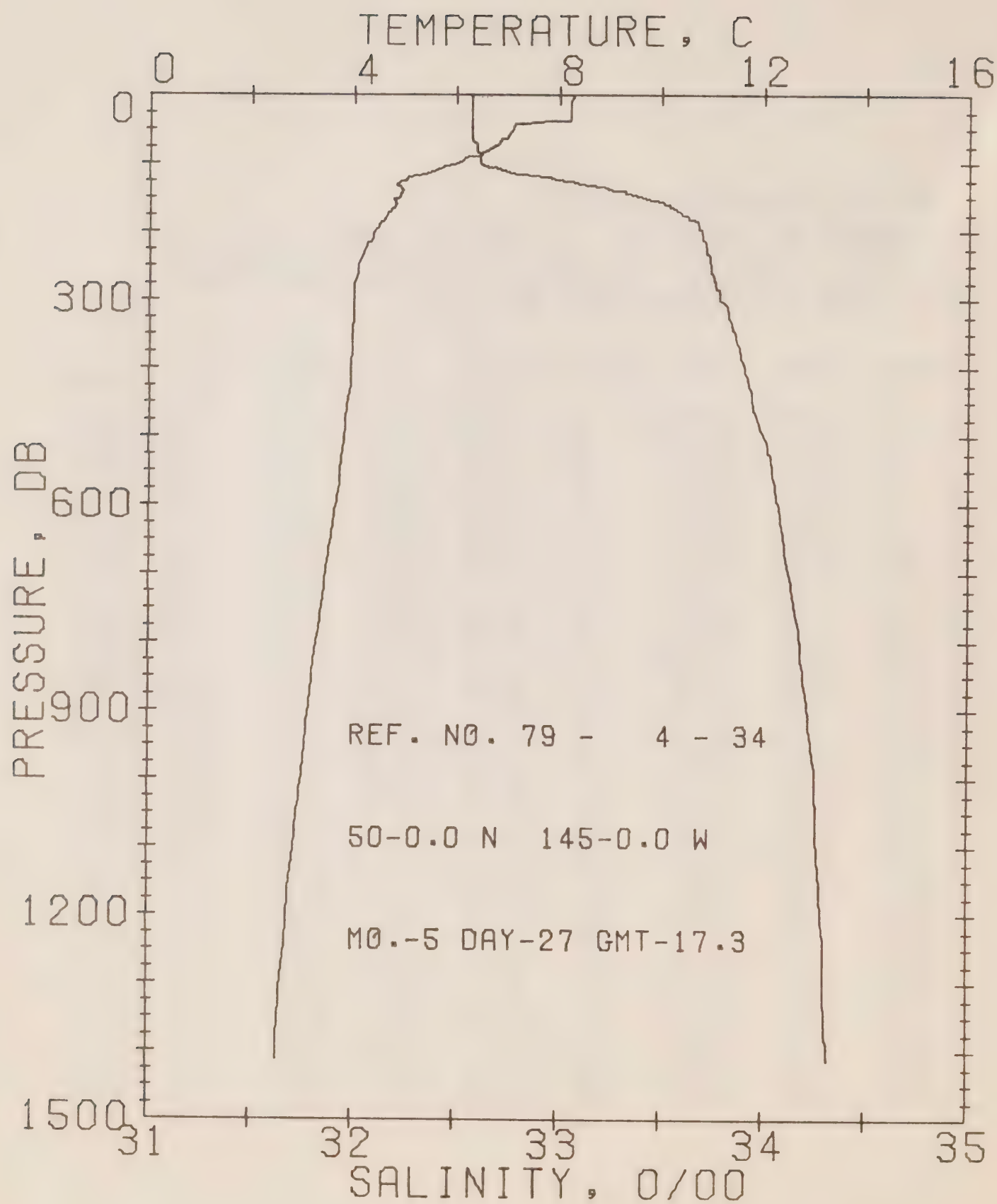
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 163 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.26	32.57	0	25.35	263.1	.00	.00	1481.
10	8.21	32.57	10	25.36	262.5	.26	.01	1481.
20	8.21	32.57	20	25.36	262.7	.53	.05	1481.
30	8.22	32.57	30	25.36	262.9	.79	.12	1481.
40	7.54	32.57	40	25.46	253.8	1.05	.21	1479.
50	7.09	32.57	50	25.52	248.0	1.30	.33	1477.
60	6.99	32.57	60	25.53	246.8	1.55	.47	1477.
70	6.82	32.59	70	25.57	243.4	1.79	.63	1476.
80	6.62	32.60	80	25.60	240.2	2.03	.81	1476.
90	6.26	32.61	89	25.66	235.1	2.27	1.02	1474.
100	6.00	32.61	99	25.69	232.1	2.50	1.25	1474.
110	5.60	32.72	109	25.83	219.3	2.73	1.49	1472.
120	5.08	32.92	119	26.04	198.6	2.94	1.73	1471.
130	4.82	33.10	129	26.21	182.4	3.13	1.98	1470.
140	4.95	33.31	139	26.37	168.2	3.31	2.22	1471.
150	4.87	33.41	149	26.45	159.9	3.47	2.46	1471.
160	4.86	33.53	159	26.55	150.9	3.63	2.71	1471.
170	4.72	33.57	169	26.60	146.5	3.78	2.96	1471.
180	4.62	33.63	179	26.66	141.1	3.92	3.21	1471.
190	4.50	33.68	189	26.71	136.3	4.06	3.47	1470.
200	4.41	33.69	199	26.73	134.5	4.19	3.74	1470.
210	4.36	33.70	209	26.74	133.3	4.33	4.02	1470.
220	4.25	33.71	218	26.76	131.5	4.46	4.31	1470.
230	4.18	33.72	228	26.77	130.1	4.59	4.61	1470.
240	4.14	33.73	238	26.79	129.0	4.72	4.92	1470.
250	4.08	33.74	248	26.80	127.8	4.85	5.24	1470.
260	4.07	33.74	258	26.80	127.7	4.98	5.58	1470.
270	4.03	33.75	268	26.81	126.7	5.10	5.92	1470.
280	4.01	33.77	278	26.83	125.3	5.23	6.27	1470.
290	3.99	33.79	288	26.85	123.4	5.35	6.63	1470.
300	3.99	33.79	298	26.85	123.3	5.48	7.00	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 34

DATE 27/ 5/79

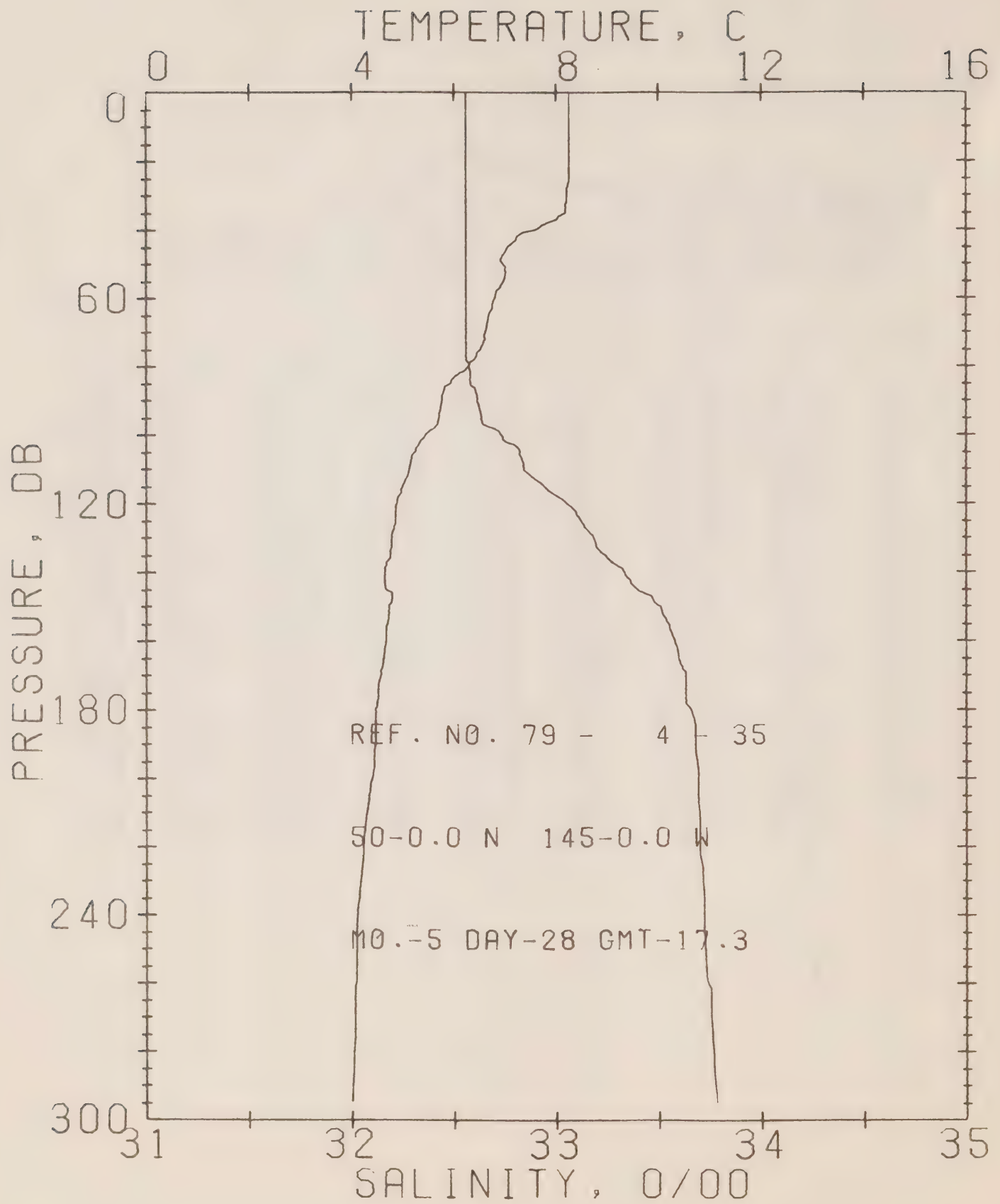
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 257 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.26	32.57	0	25.35	263.1	.00	.00	1481.
10	8.21	32.57	10	25.36	262.5	.26	.01	1481.
20	8.21	32.57	20	25.36	262.7	.53	.05	1481.
30	8.22	32.57	30	25.36	262.9	.79	.12	1481.
50	7.09	32.57	50	25.52	248.0	1.30	.33	1477.
75	6.74	32.60	75	25.59	241.6	1.91	.72	1476.
100	6.00	32.61	99	25.69	232.1	2.50	1.25	1474.
125	4.96	33.02	124	26.14	189.9	3.04	1.86	1470.
150	4.87	33.41	149	26.45	159.9	3.47	2.46	1471.
175	4.66	33.59	174	26.62	144.0	3.85	3.08	1471.
200	4.41	33.69	199	26.73	134.5	4.19	3.74	1470.
225	4.23	33.72	223	26.77	130.7	4.52	4.46	1470.
250	4.08	33.74	248	26.80	127.8	4.85	5.24	1470.
300	3.99	33.79	298	26.85	123.3	5.48	7.00	1470.
400	3.96	33.91	397	26.95	115.1	6.66	11.24	1472.
500	3.82	34.00	496	27.03	107.6	7.78	16.36	1473.
600	3.66	34.07	595	27.10	101.6	8.83	22.21	1474.
800	3.29	34.18	793	27.22	91.1	10.75	35.93	1476.
1000	2.99	34.25	990	27.31	83.6	12.50	51.91	1478.
1200	2.73	34.29	1188	27.36	79.0	14.13	70.14	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 35

DATE 28/ 5/79

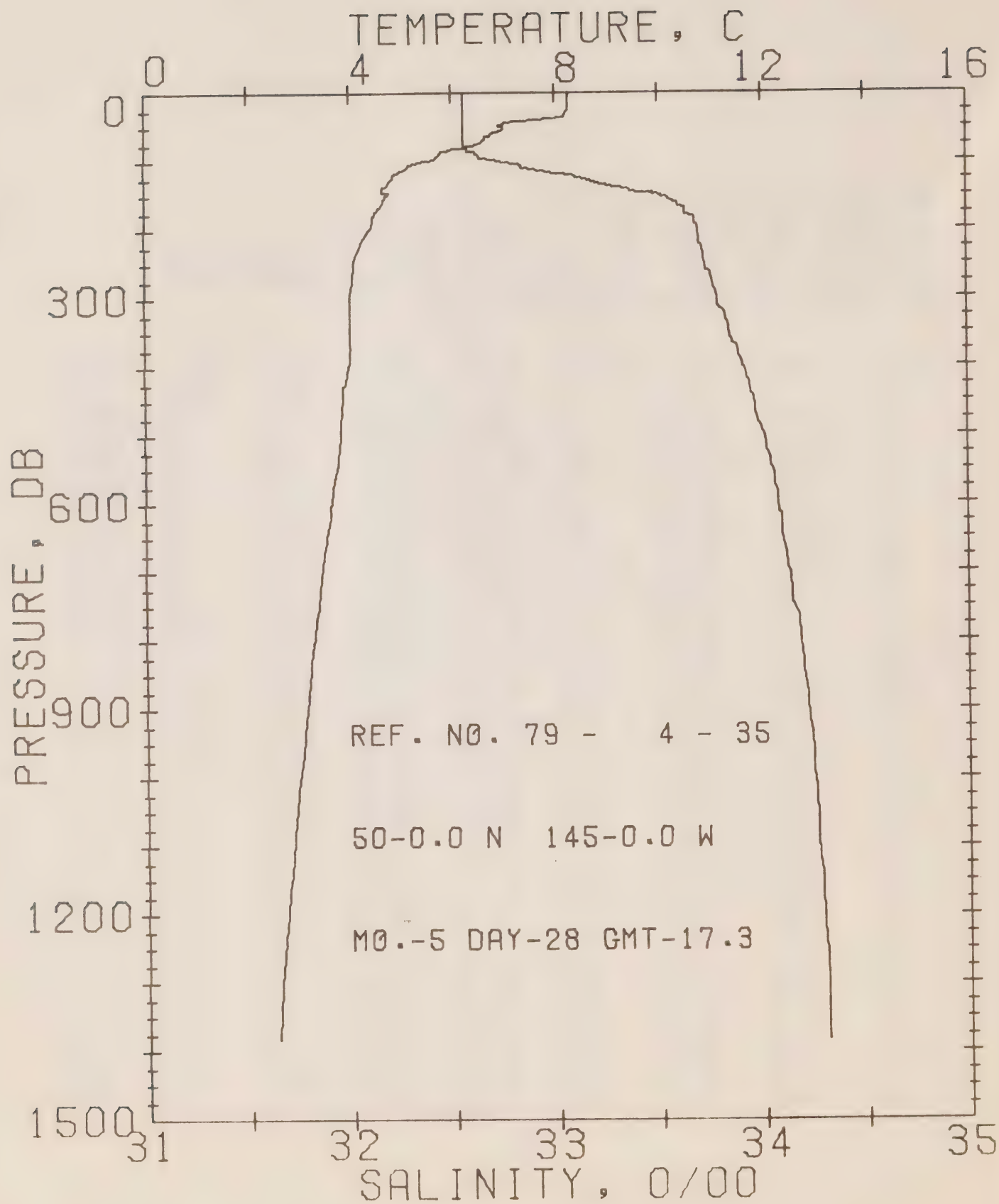
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.27	32.56	0	25.34	263.9	.00	.00	1481.
10	8.26	32.56	10	25.35	264.0	.26	.01	1481.
20	8.26	32.56	20	25.34	264.2	.53	.05	1481.
30	8.20	32.56	30	25.35	263.4	.79	.12	1481.
40	7.60	32.56	40	25.44	255.3	1.05	.21	1479.
50	6.96	32.56	50	25.53	247.1	1.30	.33	1477.
60	6.79	32.56	60	25.55	245.0	1.55	.47	1476.
70	6.62	32.56	70	25.57	243.0	1.79	.63	1475.
80	6.27	32.57	80	25.63	238.1	2.03	.81	1474.
90	5.76	32.61	89	25.72	229.2	2.27	1.01	1472.
100	5.45	32.73	99	25.85	216.8	2.49	1.23	1471.
110	5.13	32.84	109	25.97	205.1	2.70	1.46	1470.
120	4.87	33.05	119	26.17	186.6	2.90	1.69	1470.
130	4.77	33.18	129	26.29	175.6	3.08	1.92	1470.
140	4.64	33.34	139	26.42	163.0	3.25	2.15	1470.
150	4.72	33.51	149	26.55	150.8	3.41	2.38	1470.
160	4.66	33.58	159	26.61	145.0	3.55	2.62	1470.
170	4.55	33.63	169	26.66	140.2	3.70	2.86	1470.
180	4.46	33.66	179	26.70	137.1	3.84	3.11	1470.
190	4.46	33.68	189	26.71	135.7	3.97	3.36	1470.
200	4.39	33.69	199	26.73	134.3	4.11	3.63	1470.
210	4.29	33.70	209	26.74	132.8	4.24	3.91	1470.
220	4.21	33.70	218	26.75	131.8	4.37	4.20	1470.
230	4.16	33.71	228	26.77	130.7	4.50	4.50	1470.
240	4.10	33.72	238	26.78	129.4	4.63	4.81	1469.
250	4.08	33.72	248	26.79	129.0	4.76	5.13	1470.
260	4.06	33.74	258	26.80	127.6	4.89	5.47	1470.
270	4.04	33.75	268	26.81	126.6	5.02	5.81	1470.
280	4.02	33.77	278	26.83	125.3	5.15	6.16	1470.
290	4.01	33.78	288	26.84	124.7	5.27	6.53	1470.
300	4.00	33.79	298	26.85	123.7	5.39	6.90	1470.



OFFSHORE OCEANOGRAPH. GROUP

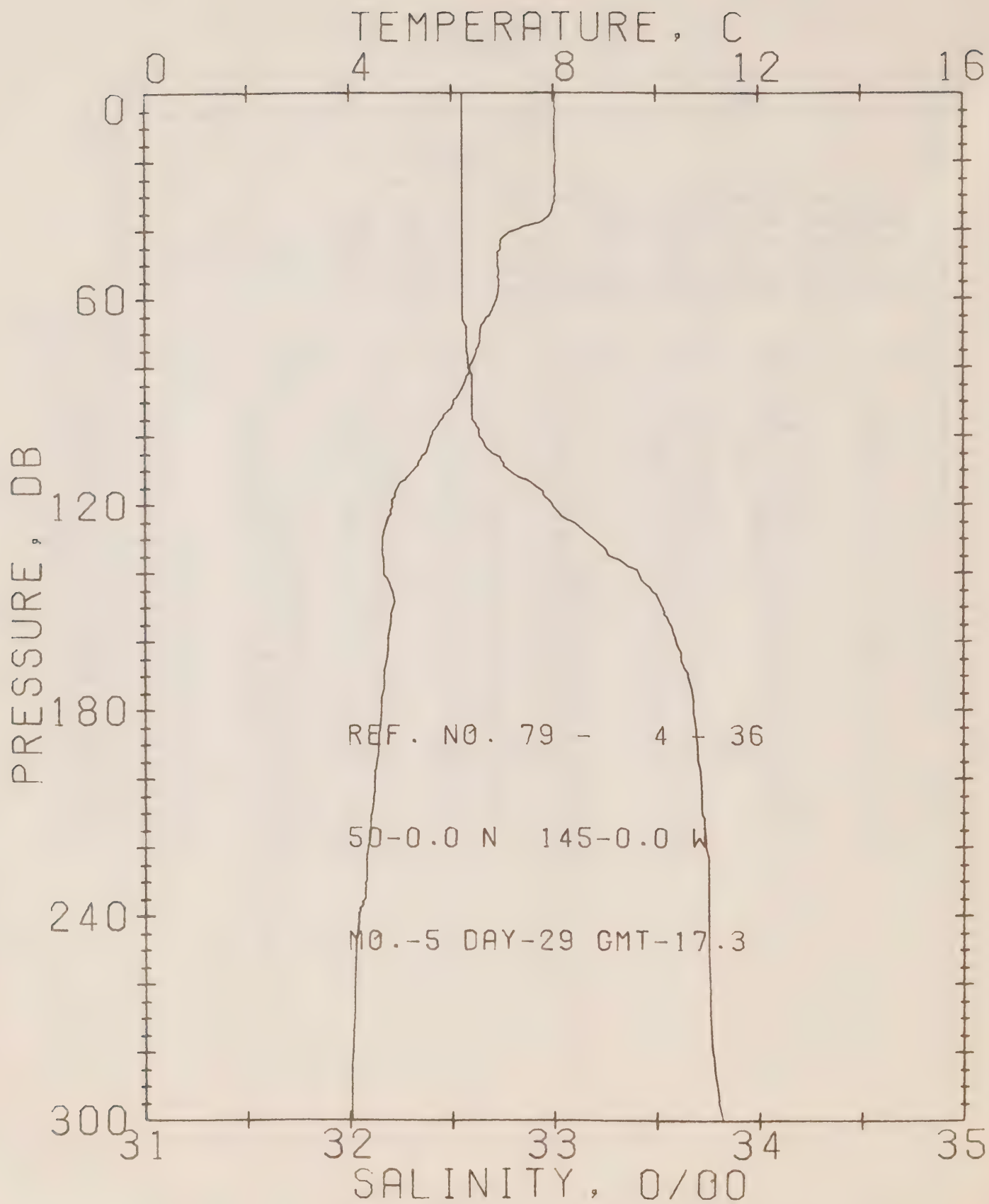
REFERENCE NO. 79- 4- 35

DATE 28/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 273 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.27	32.56	0	25.34	263.9	.00	.00	1481.
10	8.26	32.56	10	25.35	264.0	.26	.01	1481.
20	8.26	32.56	20	25.34	264.2	.53	.05	1481.
30	8.20	32.56	30	25.35	263.4	.79	.12	1481.
50	6.96	32.56	50	25.53	247.1	1.30	.33	1477.
75	6.52	32.56	75	25.59	241.8	1.91	.72	1475.
100	5.45	32.73	99	25.85	216.8	2.49	1.23	1471.
125	4.85	33.12	124	26.23	181.2	2.99	1.80	1470.
150	4.72	33.51	149	26.55	150.8	3.41	2.38	1470.
175	4.51	33.63	174	26.67	139.8	3.77	2.98	1470.
200	4.39	33.69	199	26.73	134.3	4.11	3.63	1470.
225	4.19	33.71	223	26.76	131.1	4.44	4.35	1470.
250	4.08	33.72	248	26.79	129.0	4.76	5.13	1470.
300	4.00	33.79	298	26.85	123.7	5.39	6.90	1470.
400	3.97	33.91	397	26.95	115.1	6.59	11.16	1472.
500	3.81	34.01	496	27.04	107.1	7.70	16.24	1473.
600	3.63	34.07	595	27.11	101.1	8.73	22.04	1474.
800	3.26	34.18	793	27.23	90.5	10.65	35.65	1476.
1000	2.97	34.24	990	27.31	83.8	12.39	51.58	1478.
1200	2.71	34.29	1188	27.37	78.8	14.01	69.78	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 36

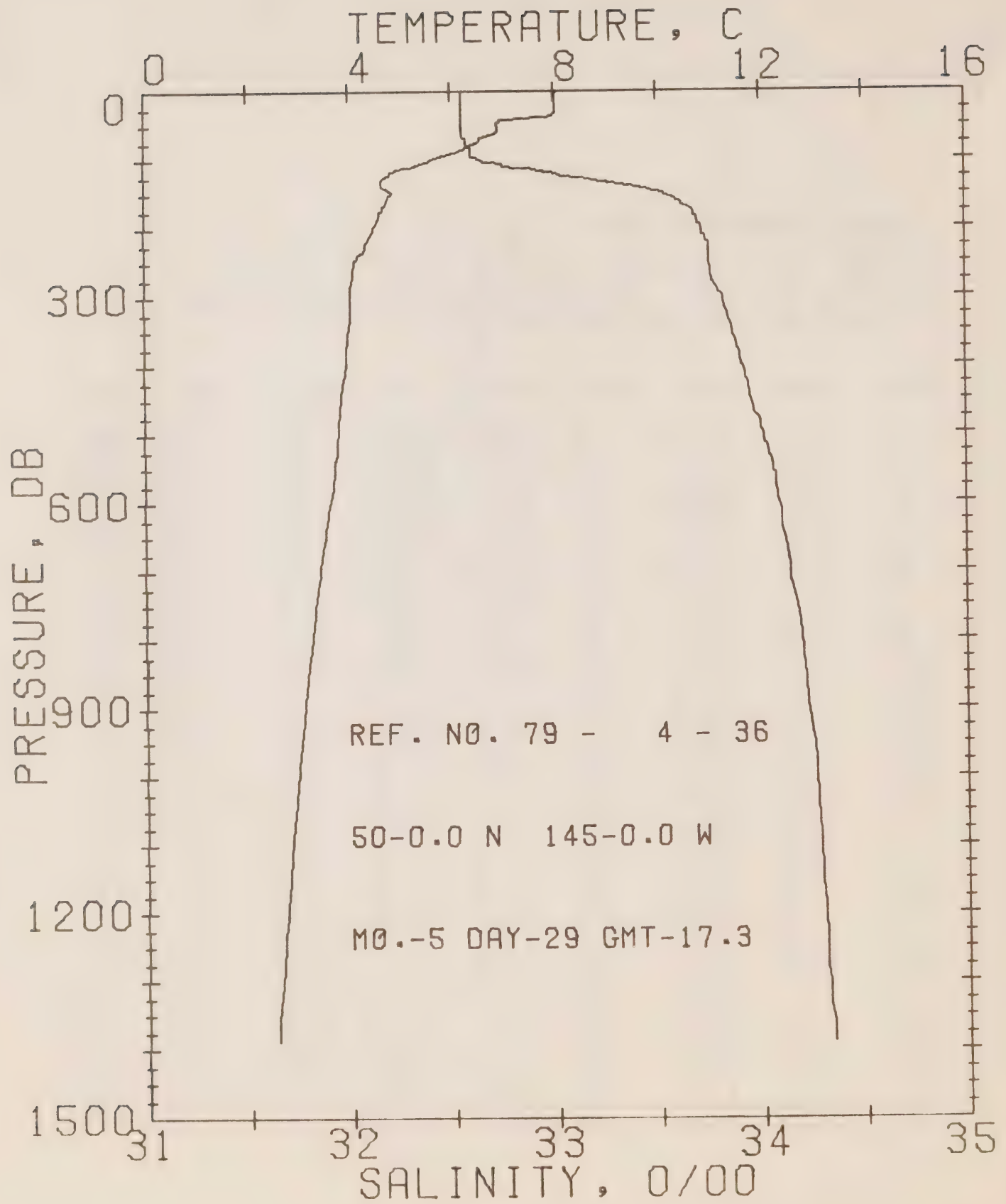
DATE 29/ 5/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.06	32.55	0	25.37	261.7	.00	.00	1480.
10	8.04	32.55	10	25.37	261.6	.26	.01	1480.
20	8.06	32.55	20	25.37	262.1	.52	.05	1480.
30	8.05	32.55	30	25.37	262.1	.79	.12	1480.
40	7.30	32.55	40	25.47	252.1	1.04	.21	1478.
50	6.90	32.55	50	25.53	247.0	1.29	.33	1476.
60	6.90	32.55	60	25.53	247.2	1.54	.47	1476.
70	6.55	32.57	70	25.59	241.4	1.78	.63	1475.
80	6.36	32.58	80	25.62	238.4	2.03	.81	1475.
90	6.03	32.60	89	25.68	233.1	2.26	1.01	1473.
100	5.61	32.63	99	25.75	226.1	2.49	1.24	1472.
110	5.26	32.78	109	25.91	211.3	2.71	1.47	1471.
120	4.83	32.99	119	26.13	190.7	2.91	1.70	1470.
130	4.65	33.20	129	26.31	173.1	3.09	1.94	1469.
140	4.68	33.41	139	26.48	157.4	3.26	2.17	1470.
150	4.85	33.53	149	26.55	150.7	3.41	2.39	1471.
160	4.75	33.59	159	26.61	144.8	3.56	2.63	1471.
170	4.68	33.65	169	26.66	140.1	3.70	2.87	1471.
180	4.61	33.68	179	26.70	137.2	3.84	3.11	1471.
190	4.55	33.70	189	26.72	135.2	3.98	3.37	1471.
200	4.49	33.71	199	26.74	133.6	4.11	3.64	1470.
210	4.44	33.72	209	26.75	132.7	4.24	3.91	1470.
220	4.34	33.74	218	26.77	130.2	4.37	4.20	1470.
230	4.32	33.75	228	26.78	129.3	4.50	4.50	1470.
240	4.16	33.75	238	26.80	127.7	4.63	4.81	1470.
250	4.10	33.75	248	26.81	127.2	4.76	5.13	1470.
260	4.09	33.76	258	26.81	126.6	4.89	5.46	1470.
270	4.07	33.76	268	26.82	126.2	5.01	5.80	1470.
280	4.04	33.77	278	26.83	125.1	5.14	6.15	1470.
290	4.03	33.79	288	26.85	123.6	5.26	6.51	1470.
300	4.02	33.82	298	26.87	121.6	5.39	6.88	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 36

DATE 29/ 5/79

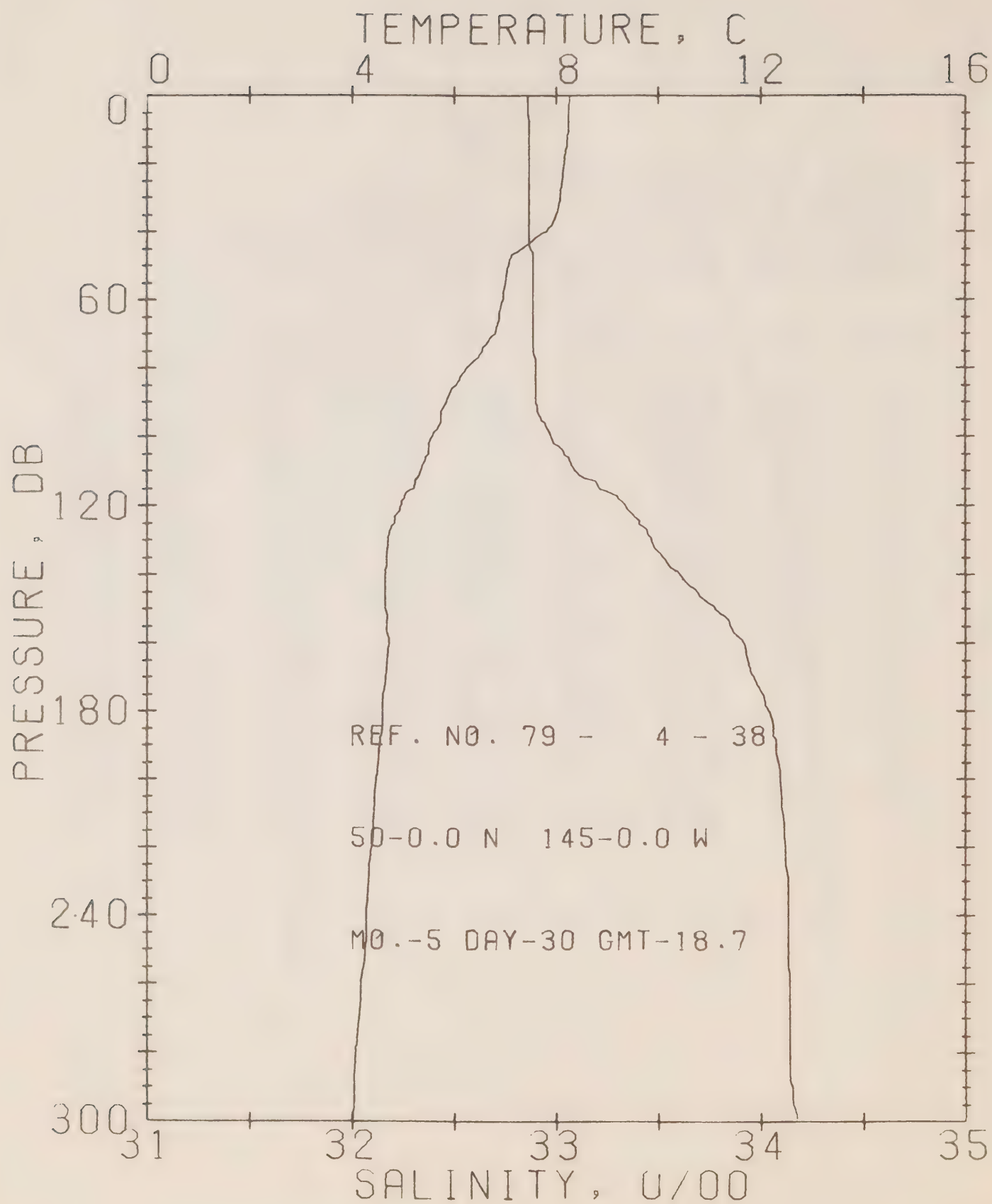
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 263 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.06	32.55	0	25.37	261.7	.00	.00	1480.
10	8.04	32.55	10	25.37	261.6	.26	.01	1480.
20	8.06	32.55	20	25.37	262.1	.52	.05	1480.
30	8.05	32.55	30	25.37	262.1	.79	.12	1480.
50	6.90	32.55	50	25.53	247.0	1.29	.33	1476.
75	6.49	32.57	75	25.60	240.7	1.91	.72	1475.
100	5.61	32.63	99	25.75	226.1	2.49	1.24	1472.
125	4.73	33.10	124	26.22	181.4	3.00	1.82	1469.
150	4.85	33.53	149	26.55	150.7	3.41	2.39	1471.
175	4.65	33.67	174	26.69	138.1	3.77	2.99	1471.
200	4.49	33.71	199	26.74	133.6	4.11	3.64	1470.
225	4.32	33.75	223	26.78	129.3	4.44	4.35	1470.
250	4.10	33.75	248	26.81	127.2	4.76	5.13	1470.
300	4.02	33.82	298	26.87	121.6	5.39	6.88	1470.
400	3.94	33.91	397	26.95	114.8	6.57	11.09	1472.
500	3.78	34.01	496	27.04	106.4	7.67	16.15	1473.
600	3.61	34.09	595	27.12	99.8	8.70	21.91	1474.
800	3.25	34.19	793	27.24	89.3	10.59	35.35	1476.
1000	2.95	34.26	990	27.32	82.3	12.30	51.05	1478.
1200	2.71	34.30	1188	27.37	78.0	13.91	68.98	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 38

DATE 30/ 5/79

POSITION 50- .0N, 145- .0W

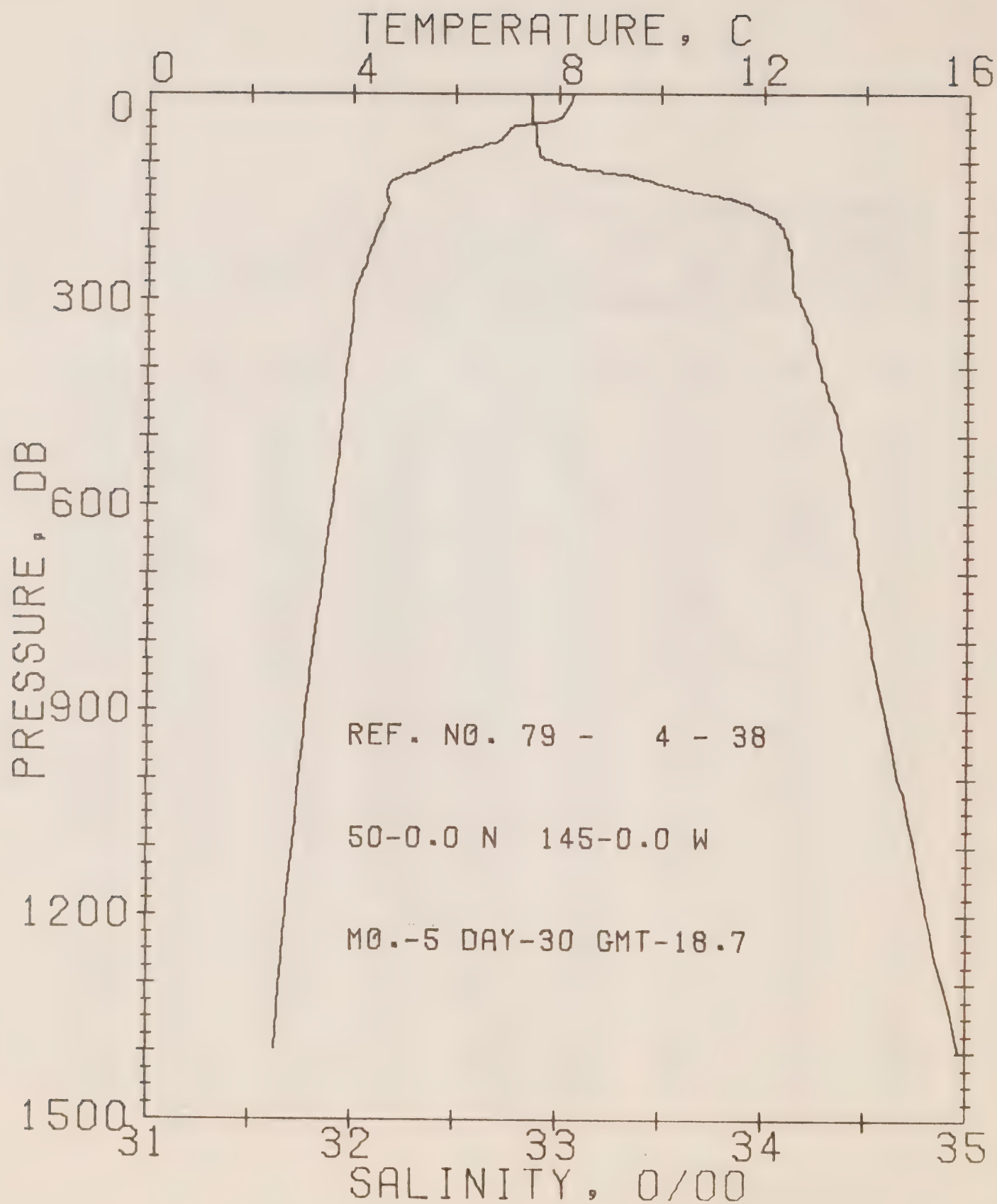
GMT 18.7

STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.26	32.86	0	25.58	241.5	.00	.00	1481.
10	8.23	32.87	10	25.59	240.5	.24	.01	1481.
20	8.15	32.87	20	25.60	239.5	.48	.05	1481.
30	8.08	32.87	30	25.61	238.7	.72	.11	1481.
40	7.80	32.87	40	25.65	235.0	.96	.19	1480.
50	7.06	32.89	50	25.77	223.8	1.19	.30	1477.
60	6.97	32.89	60	25.79	222.7	1.41	.42	1477.
70	6.79	32.89	70	25.81	220.6	1.63	.57	1477.
80	6.24	32.90	79	25.89	213.1	1.85	.74	1475.
90	5.83	32.90	89	25.94	208.3	2.06	.92	1473.
100	5.57	32.98	99	26.03	199.7	2.26	1.12	1472.
110	5.34	33.09	109	26.15	188.7	2.46	1.32	1472.
120	4.96	33.34	119	26.39	165.9	2.63	1.53	1471.
130	4.70	33.47	129	26.52	153.4	2.79	1.73	1470.
140	4.65	33.60	139	26.63	143.0	2.94	1.94	1470.
150	4.65	33.78	149	26.77	129.9	3.08	2.14	1470.
160	4.72	33.92	159	26.87	120.2	3.20	2.34	1471.
170	4.65	33.97	169	26.92	115.8	3.32	2.54	1471.
180	4.59	34.04	179	26.98	110.1	3.43	2.74	1471.
190	4.53	34.07	189	27.01	107.3	3.54	2.94	1471.
200	4.45	34.09	199	27.04	105.0	3.65	3.15	1471.
210	4.41	34.10	208	27.05	103.6	3.75	3.37	1471.
220	4.37	34.12	218	27.07	102.1	3.86	3.60	1471.
230	4.31	34.13	228	27.09	100.8	3.96	3.83	1471.
240	4.28	34.13	238	27.09	100.6	4.06	4.07	1471.
250	4.24	34.13	248	27.09	100.3	4.16	4.32	1471.
260	4.17	34.14	258	27.11	98.8	4.26	4.58	1471.
270	4.13	34.14	268	27.11	98.5	4.36	4.85	1471.
280	4.05	34.14	278	27.12	97.8	4.45	5.12	1470.
290	4.02	34.15	288	27.13	96.8	4.55	5.41	1471.
300	4.00	34.17	298	27.15	95.1	4.65	5.70	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 38

DATE 30/ 5/79

POSITION 50- .0N, 145- .0W

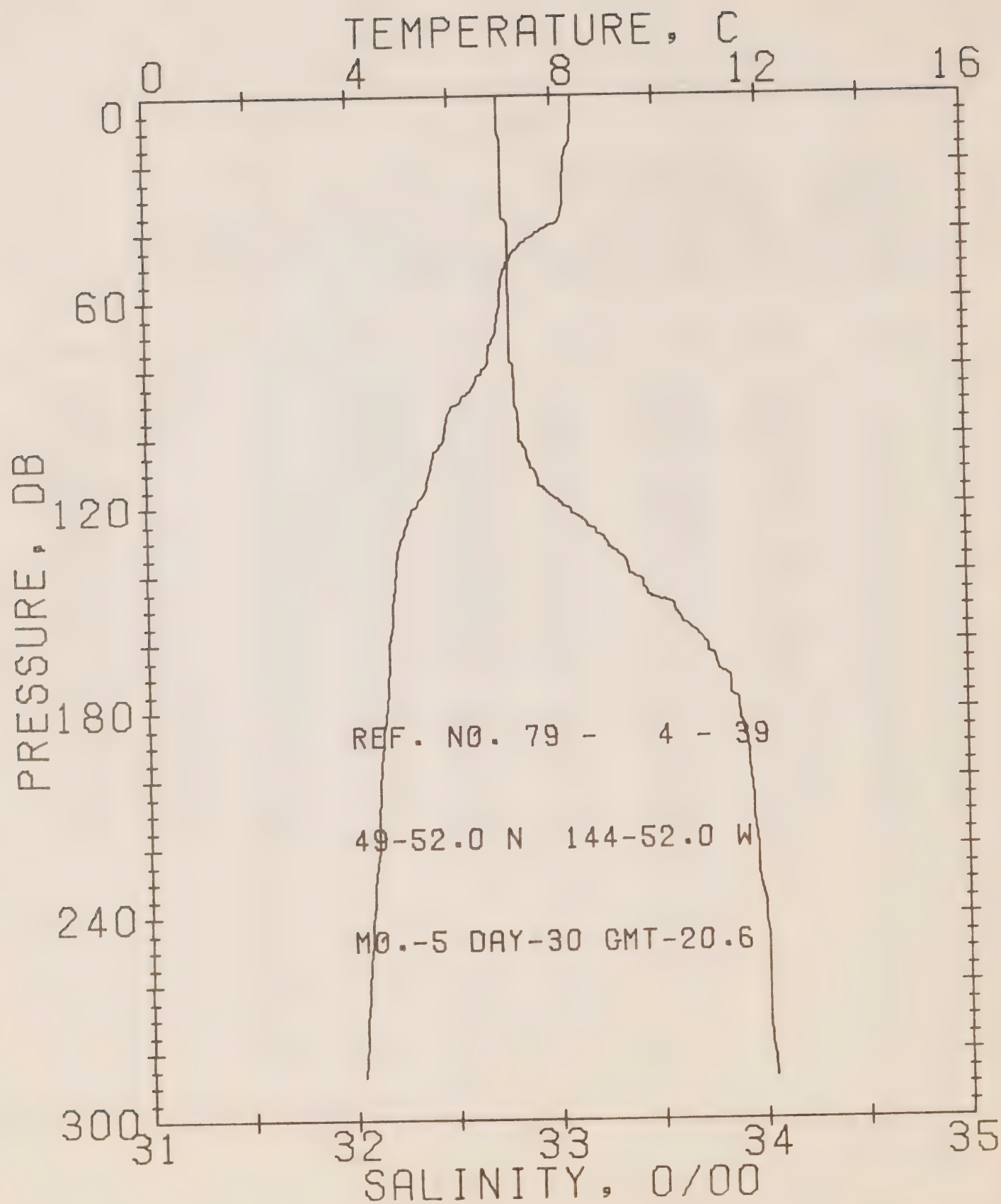
GMT 18.7

STATION P

RESULTS OF STP CAST 265 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.26	32.86	0	25.58	241.5	.00	.00	1481.
10	8.23	32.87	10	25.59	240.5	.24	.01	1481.
20	8.15	32.87	20	25.60	239.5	.48	.05	1481.
30	8.08	32.87	30	25.61	238.7	.72	.11	1481.
50	7.06	32.89	50	25.77	223.8	1.19	.30	1477.
75	6.54	32.89	75	25.84	217.5	1.74	.65	1476.
100	5.57	32.98	99	26.03	199.7	2.26	1.12	1472.
125	4.83	33.41	124	26.46	159.3	2.71	1.63	1470.
150	4.65	33.78	149	26.77	129.9	3.08	2.14	1470.
175	4.59	34.01	174	26.96	112.3	3.38	2.64	1471.
200	4.45	34.09	199	27.04	105.0	3.65	3.15	1471.
225	4.33	34.12	223	27.07	101.7	3.91	3.71	1471.
250	4.24	34.13	248	27.09	100.3	4.16	4.32	1471.
300	4.00	34.17	298	27.15	95.1	4.65	5.70	1471.
400	3.88	34.28	397	27.25	86.5	5.55	8.92	1472.
500	3.76	34.38	496	27.34	78.6	6.38	12.69	1473.
600	3.59	34.43	595	27.40	73.8	7.14	16.96	1474.
800	3.26	34.53	793	27.51	64.7	8.53	26.83	1476.
1000	2.97	34.66	990	27.64	52.9	9.71	37.59	1478.
1200	2.71	34.81	1188	27.78	40.7	10.63	47.95	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 39

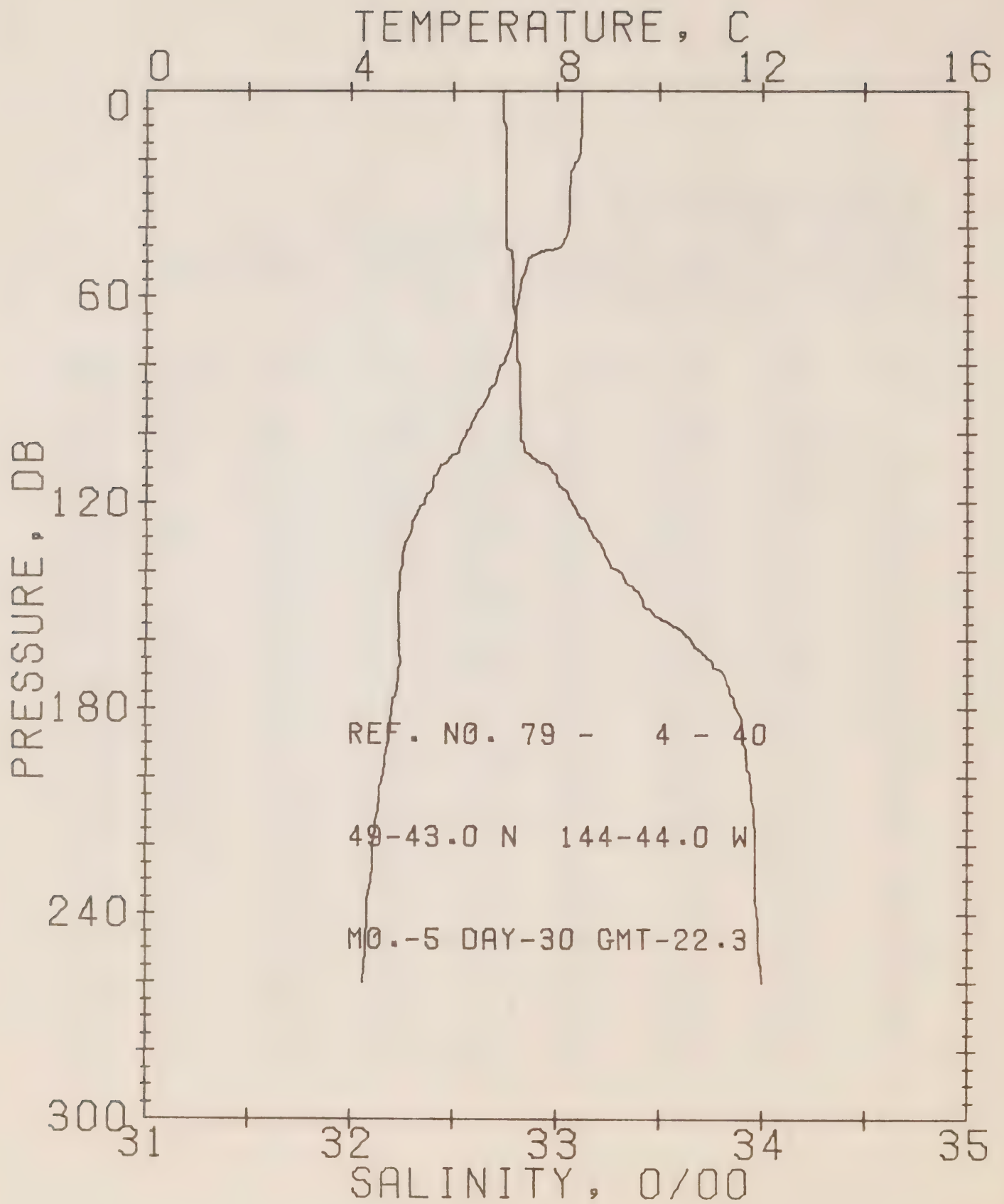
DATE 30/ 5/79

POSITION 49-52.0N, 144-52.0W GMT 20.6 STATION E3

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.41	32.74	0	25.46	252.5	.00	.00	1482.
10	8.38	32.74	10	25.47	252.3	.25	.01	1482.
20	8.24	32.75	20	25.50	249.7	.50	.05	1481.
30	8.21	32.75	30	25.50	249.4	.75	.11	1481.
40	7.68	32.79	40	25.61	239.3	1.00	.20	1479.
50	7.08	32.79	50	25.69	231.5	1.23	.31	1477.
60	6.95	32.79	60	25.71	230.0	1.46	.44	1477.
70	6.85	32.79	70	25.72	228.8	1.69	.59	1477.
80	6.62	32.80	79	25.76	225.2	1.92	.77	1476.
90	6.13	32.81	89	25.83	218.6	2.14	.96	1474.
100	5.83	32.83	99	25.88	213.7	2.36	1.17	1473.
110	5.54	32.90	109	25.97	205.2	2.57	1.39	1472.
120	5.28	33.04	119	26.12	191.9	2.77	1.62	1472.
130	4.96	33.24	129	26.31	173.5	2.95	1.86	1471.
140	4.87	33.36	139	26.41	163.6	3.12	2.09	1471.
150	4.81	33.57	149	26.59	147.3	3.27	2.32	1471.
160	4.73	33.72	159	26.71	135.3	3.41	2.54	1471.
170	4.70	33.84	169	26.81	126.1	3.55	2.76	1471.
180	4.66	33.88	179	26.85	122.4	3.67	2.98	1471.
190	4.58	33.92	189	26.89	118.8	3.79	3.21	1471.
200	4.52	33.94	199	26.91	117.3	3.91	3.44	1471.
210	4.49	33.95	209	26.92	116.0	4.03	3.69	1471.
220	4.47	33.97	218	26.94	114.4	4.14	3.94	1471.
230	4.39	33.98	228	26.95	113.2	4.26	4.20	1471.
240	4.34	34.00	238	26.98	110.9	4.37	4.47	1471.
250	4.30	34.01	248	26.99	109.9	4.48	4.75	1471.
260	4.25	34.01	258	27.00	109.4	4.59	5.03	1471.
270	4.20	34.01	268	27.00	109.0	4.70	5.33	1471.
280	4.16	34.03	278	27.02	107.5	4.80	5.63	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 40

DATE 30/ 5/79

POSITION 49-43.0N, 144-44.0W

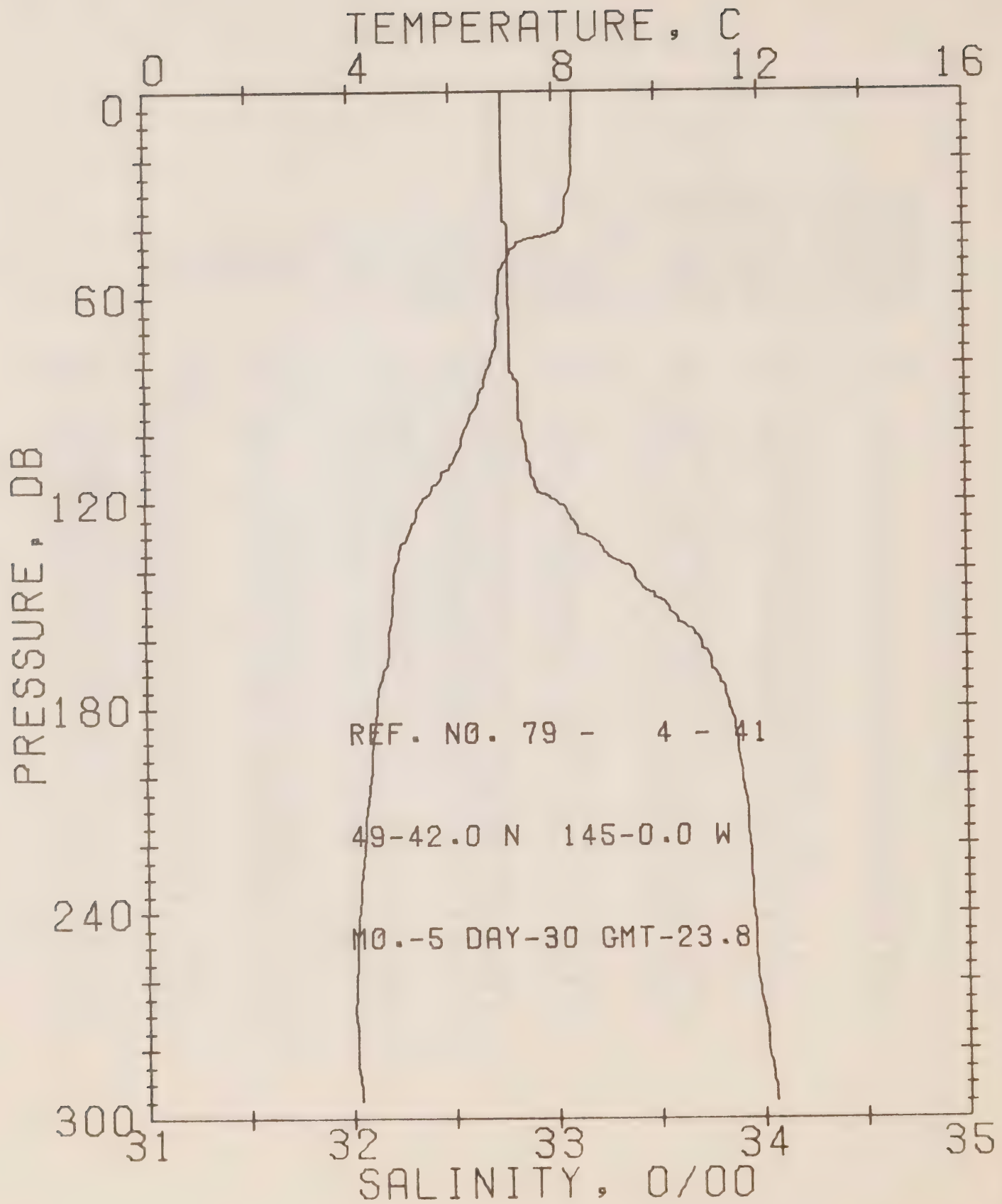
GMT 22.3

STATION E4

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.47	32.74	0	25.45	253.4	.00	.00	1482.
10	8.49	32.74	10	25.46	253.4	.25	.01	1482.
20	8.39	32.75	20	25.47	251.8	.51	.05	1482.
30	8.25	32.75	30	25.50	250.0	.76	.12	1481.
40	8.21	32.75	40	25.50	249.6	1.01	.20	1481.
50	7.41	32.79	50	25.65	235.8	1.25	.32	1479.
60	7.25	32.79	60	25.67	233.8	1.49	.45	1478.
70	7.15	32.80	70	25.69	231.7	1.72	.60	1478.
80	6.91	32.82	80	25.74	227.4	1.95	.78	1477.
90	6.63	32.82	89	25.78	224.0	2.17	.97	1476.
100	6.24	32.83	99	25.83	218.6	2.40	1.19	1475.
110	5.70	32.97	109	26.01	201.8	2.61	1.42	1473.
120	5.44	33.07	119	26.12	191.4	2.80	1.65	1472.
130	5.12	33.18	129	26.24	179.7	2.99	1.88	1471.
140	4.97	33.31	139	26.36	168.4	3.16	2.12	1471.
150	4.94	33.43	149	26.46	159.2	3.33	2.36	1471.
160	4.94	33.65	159	26.64	142.9	3.48	2.60	1472.
170	4.93	33.81	169	26.76	130.9	3.62	2.83	1472.
180	4.79	33.87	179	26.83	124.6	3.74	3.06	1472.
190	4.72	33.91	189	26.87	121.3	3.87	3.29	1471.
200	4.61	33.94	199	26.90	117.9	3.99	3.53	1471.
210	4.52	33.96	209	26.93	115.6	4.10	3.77	1471.
220	4.44	33.97	218	26.94	114.1	4.22	4.02	1471.
230	4.41	33.97	228	26.95	113.8	4.33	4.29	1471.
240	4.31	33.98	238	26.96	112.5	4.44	4.56	1471.
250	4.29	33.98	248	26.97	112.0	4.56	4.84	1471.
260	4.25	34.00	258	26.99	110.2	4.67	5.13	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 41

DATE 30/ 5/79

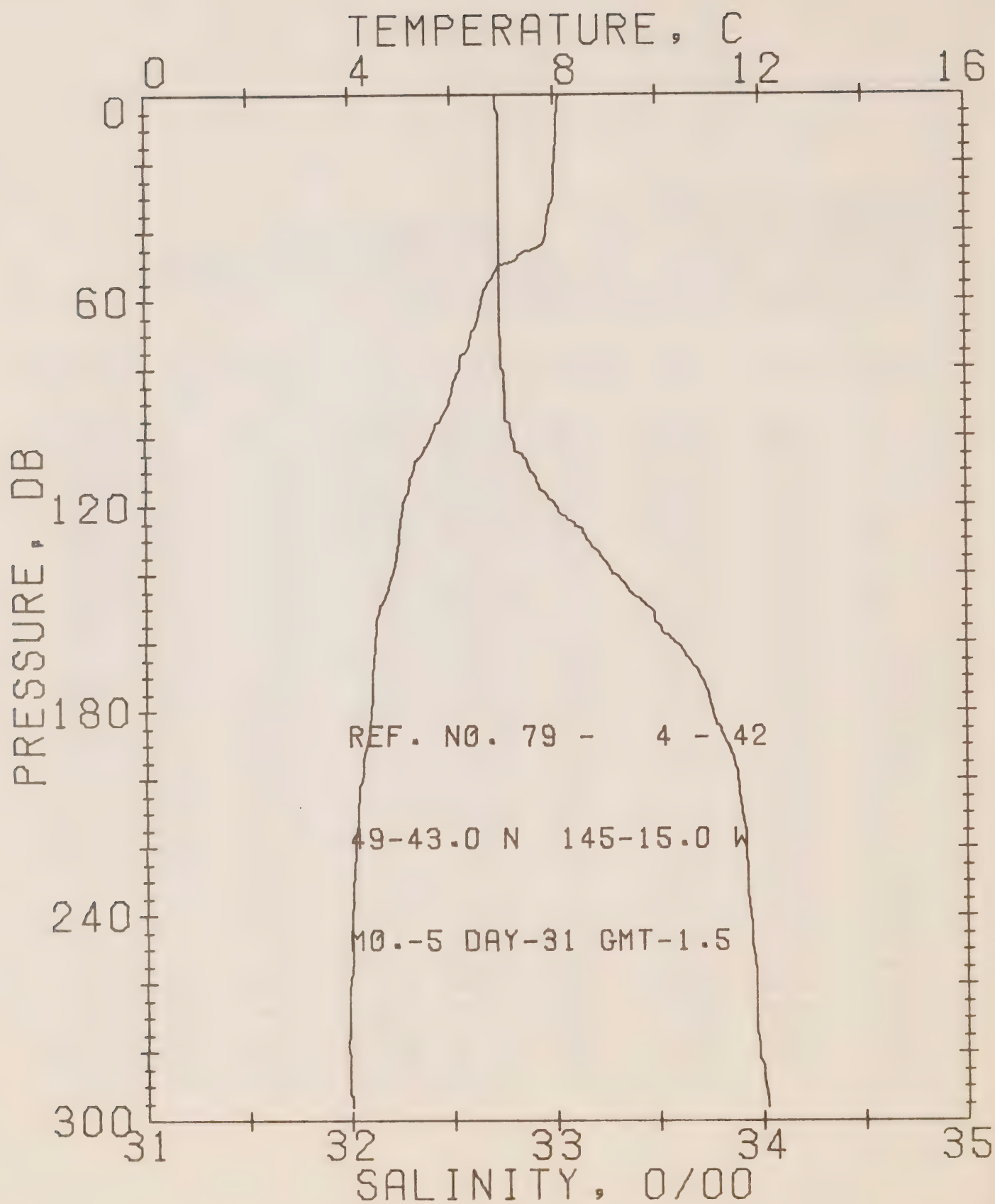
POSITION 49-42.0N, 145- .0W GMT 23.8

STATION C1

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.41	32.75	0	25.47	251.8	.00	.00	1482.
10	8.39	32.75	10	25.47	251.7	.25	.01	1482.
20	8.37	32.75	20	25.48	251.6	.50	.05	1482.
30	8.29	32.76	30	25.50	249.8	.75	.12	1482.
40	8.13	32.78	40	25.54	246.2	1.00	.20	1481.
50	7.05	32.78	50	25.69	231.8	1.24	.31	1477.
60	6.92	32.78	60	25.71	230.3	1.47	.44	1477.
70	6.88	32.79	70	25.72	229.2	1.70	.59	1477.
80	6.74	32.79	79	25.74	227.5	1.93	.77	1476.
90	6.53	32.83	89	25.80	222.0	2.15	.96	1476.
100	6.21	32.85	99	25.85	216.7	2.37	1.18	1475.
110	5.95	32.88	109	25.91	211.5	2.59	1.41	1474.
120	5.39	33.01	119	26.08	195.3	2.79	1.65	1472.
130	5.11	33.16	129	26.23	181.1	2.98	1.89	1471.
140	4.87	33.38	139	26.43	162.1	3.15	2.12	1471.
150	4.84	33.54	149	26.56	149.9	3.31	2.35	1471.
160	4.75	33.70	159	26.70	137.0	3.45	2.58	1471.
170	4.63	33.78	169	26.77	129.8	3.59	2.81	1471.
180	4.50	33.84	179	26.83	124.1	3.71	3.03	1470.
190	4.44	33.88	189	26.87	120.5	3.84	3.26	1470.
200	4.38	33.90	199	26.90	118.5	3.96	3.50	1470.
210	4.30	33.93	209	26.93	115.5	4.07	3.74	1470.
220	4.25	33.94	218	26.94	114.5	4.19	4.00	1470.
230	4.18	33.94	228	26.95	113.3	4.30	4.26	1470.
240	4.12	33.95	238	26.97	112.1	4.41	4.53	1470.
250	4.07	33.96	248	26.97	111.2	4.53	4.81	1470.
260	4.05	33.97	258	26.99	110.1	4.64	5.09	1470.
270	4.05	34.00	268	27.01	108.2	4.75	5.39	1470.
280	4.08	34.01	278	27.02	107.6	4.85	5.69	1470.
290	4.14	34.05	288	27.03	106.0	4.96	6.00	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 42

DATE 31/ 5/79

POSITION 49-43.0N, 145-15.0W

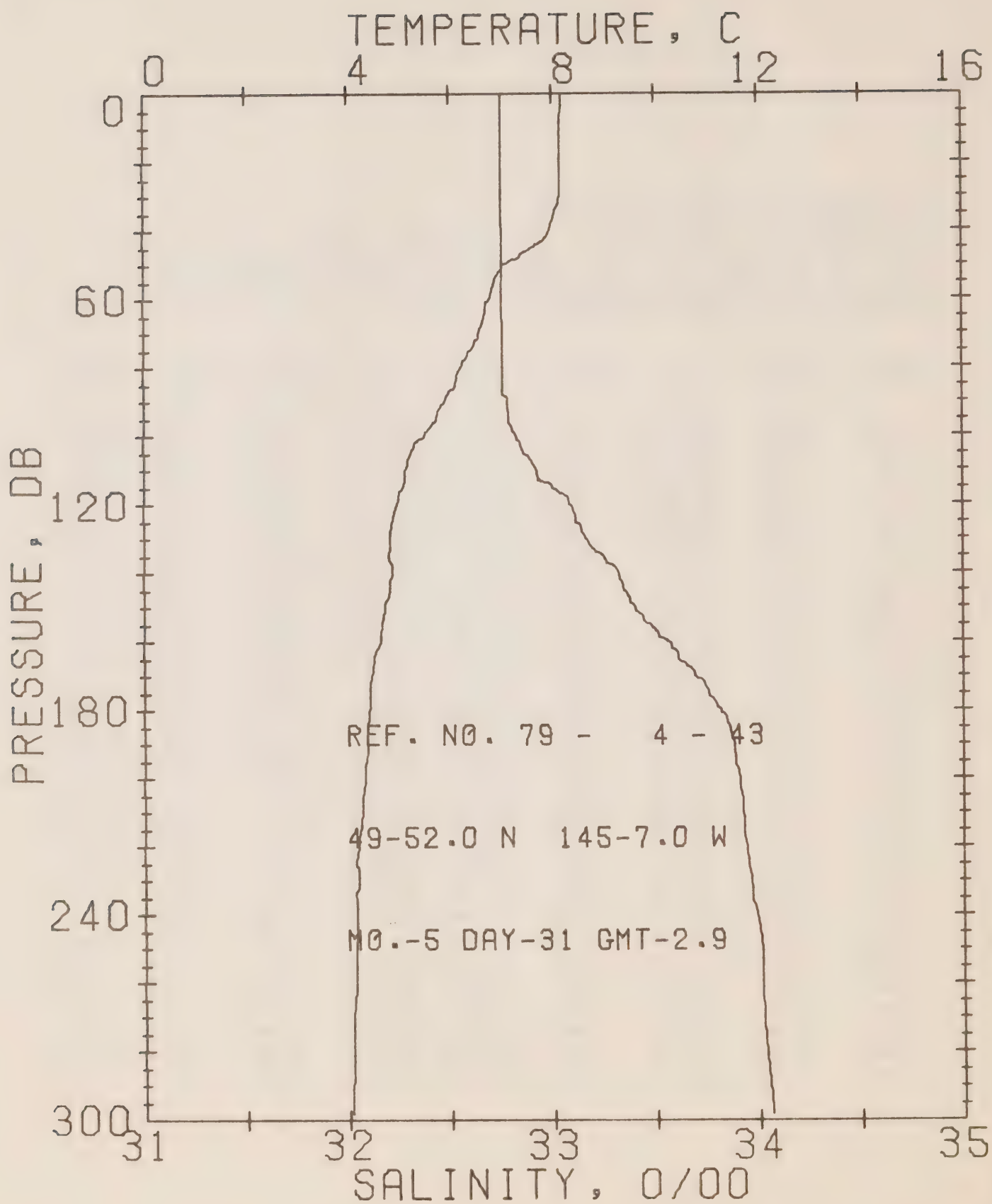
GMT 1.5

STATION W4

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.10	32.72	0	25.49	249.7	.00	.00	1480.
10	8.05	32.73	10	25.51	248.4	.25	.01	1480.
20	8.01	32.73	20	25.51	248.0	.50	.05	1480.
30	7.99	32.73	30	25.52	247.8	.75	.11	1480.
40	7.85	32.73	40	25.54	246.0	.99	.20	1480.
50	6.92	32.73	50	25.67	233.9	1.23	.31	1477.
60	6.58	32.73	60	25.71	229.7	1.47	.44	1475.
70	6.38	32.73	70	25.74	227.4	1.69	.59	1475.
80	6.15	32.74	79	25.77	224.0	1.92	.77	1474.
90	5.95	32.76	89	25.81	220.2	2.14	.96	1473.
100	5.56	32.79	99	25.89	213.5	2.36	1.17	1472.
110	5.22	32.88	109	26.00	203.1	2.57	1.39	1471.
120	5.03	33.00	119	26.11	192.1	2.76	1.62	1470.
130	4.95	33.15	129	26.24	180.1	2.95	1.86	1470.
140	4.84	33.28	139	26.35	169.2	3.12	2.10	1470.
150	4.57	33.46	149	26.53	153.0	3.29	2.34	1470.
160	4.49	33.58	159	26.63	143.2	3.43	2.57	1470.
170	4.44	33.70	169	26.73	133.8	3.57	2.80	1470.
180	4.40	33.76	179	26.78	129.0	3.70	3.04	1470.
190	4.31	33.83	189	26.85	122.8	3.83	3.28	1470.
200	4.22	33.88	199	26.90	118.3	3.95	3.51	1470.
210	4.12	33.90	209	26.92	115.9	4.07	3.76	1469.
220	4.07	33.92	218	26.94	113.9	4.18	4.01	1469.
230	4.02	33.93	228	26.96	112.7	4.29	4.27	1469.
240	4.01	33.94	238	26.97	111.7	4.41	4.54	1469.
250	4.02	33.95	248	26.98	111.1	4.52	4.82	1470.
260	3.96	33.97	258	26.99	109.4	4.63	5.10	1470.
270	3.96	33.97	268	26.99	109.5	4.74	5.40	1470.
280	3.96	33.98	278	27.00	108.8	4.85	5.70	1470.
290	3.95	34.01	288	27.02	107.0	4.95	6.02	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 43

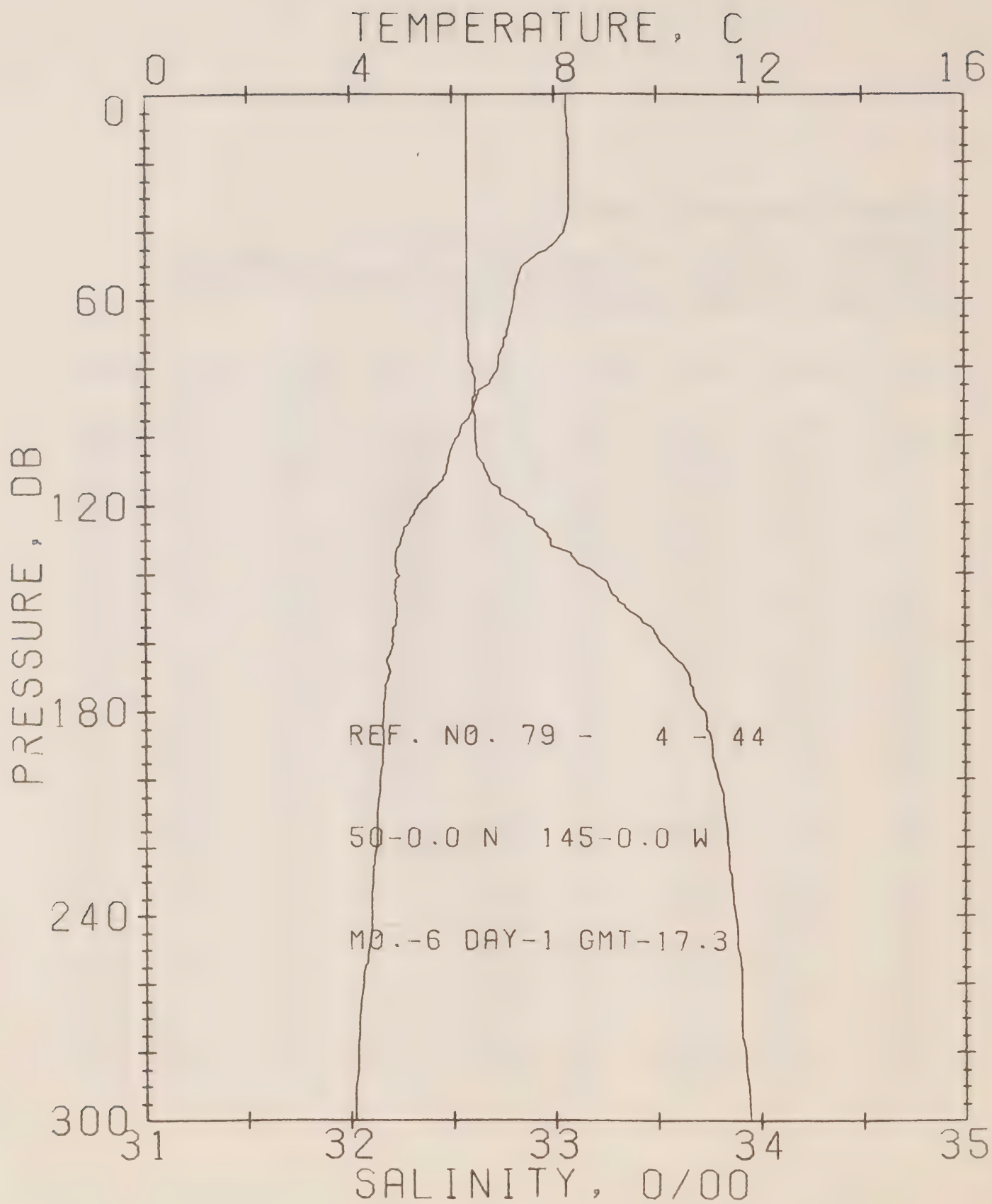
DATE 31/ 5/79

POSITION 49-52.0N, 145- 7.0W GMT 2.9 STATION W3

RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.18	32.75	0	25.51	248.5	.00	.00	1481.
10	8.16	32.75	10	25.51	248.4	.25	.01	1481.
20	8.17	32.75	20	25.51	248.7	.50	.05	1481.
30	8.16	32.75	30	25.51	248.7	.75	.11	1481.
40	7.94	32.76	40	25.55	245.1	.99	.20	1480.
50	7.03	32.76	50	25.68	233.1	1.23	.31	1477.
60	6.77	32.75	60	25.70	230.6	1.46	.44	1476.
70	6.57	32.76	70	25.74	227.5	1.69	.59	1476.
80	6.22	32.76	79	25.78	223.3	1.92	.77	1474.
90	5.90	32.78	89	25.84	218.1	2.14	.96	1473.
100	5.48	32.82	99	25.92	210.4	2.36	1.17	1472.
110	5.13	32.92	109	26.04	199.1	2.56	1.38	1471.
120	4.96	33.08	119	26.18	185.3	2.75	1.61	1470.
130	4.82	33.16	129	26.26	177.9	2.93	1.84	1470.
140	4.87	33.32	139	26.38	166.6	3.11	2.08	1471.
150	4.71	33.40	149	26.46	159.0	3.27	2.32	1470.
160	4.63	33.56	159	26.60	146.2	3.42	2.56	1470.
170	4.46	33.69	169	26.72	134.8	3.56	2.80	1470.
180	4.41	33.82	179	26.83	124.6	3.69	3.03	1470.
190	4.37	33.88	189	26.88	119.8	3.81	3.26	1470.
200	4.31	33.91	199	26.91	117.3	3.93	3.49	1470.
210	4.27	33.92	209	26.92	115.7	4.05	3.74	1470.
220	4.18	33.94	218	26.95	113.6	4.16	3.99	1470.
230	4.18	33.96	228	26.96	112.2	4.28	4.25	1470.
240	4.16	33.99	238	26.99	110.0	4.39	4.51	1470.
250	4.14	34.01	248	27.01	108.3	4.50	4.79	1470.
260	4.12	34.01	258	27.01	108.1	4.61	5.07	1470.
270	4.09	34.02	268	27.02	107.1	4.71	5.36	1470.
280	4.07	34.03	278	27.03	106.3	4.82	5.66	1470.
290	4.06	34.05	288	27.05	104.9	4.93	5.96	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 44

DATE 1/ 6/79

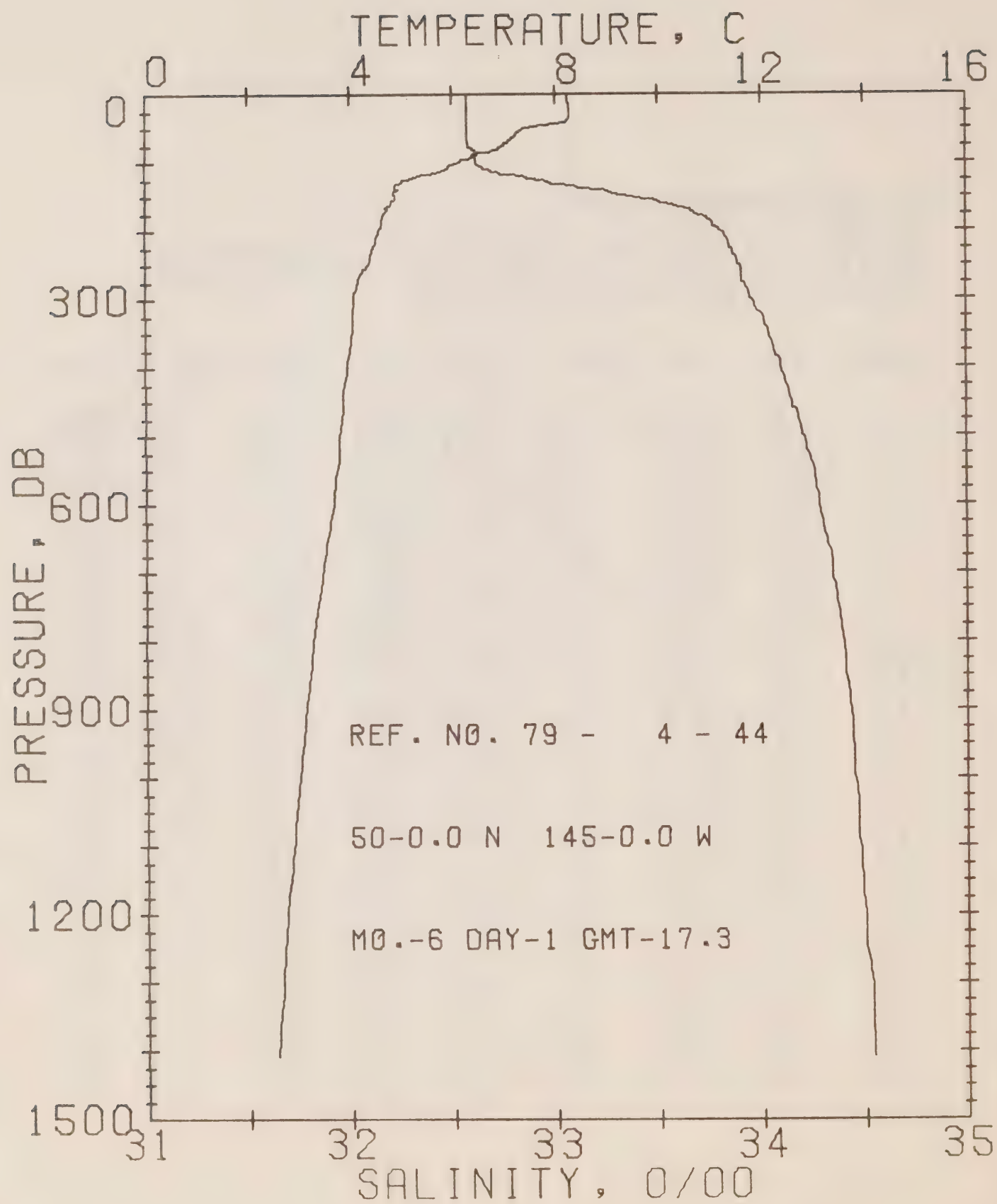
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.24	32.57	0	25.36	262.8	.00	.00	1481.
10	8.27	32.57	10	25.35	263.4	.26	.01	1481.
20	8.29	32.57	20	25.35	263.8	.53	.05	1481.
30	8.29	32.57	30	25.35	264.0	.79	.12	1481.
40	8.21	32.57	40	25.36	262.9	1.05	.22	1481.
50	7.42	32.57	50	25.47	252.3	1.31	.33	1478.
60	7.21	32.57	60	25.50	249.7	1.56	.47	1478.
70	7.07	32.57	70	25.52	248.0	1.81	.64	1477.
80	6.90	32.60	80	25.57	243.7	2.06	.83	1477.
90	6.46	32.60	89	25.63	238.3	2.30	1.04	1475.
100	6.14	32.61	99	25.67	233.8	2.53	1.26	1474.
110	5.88	32.66	109	25.74	227.1	2.77	1.51	1473.
120	5.34	32.82	119	25.93	209.0	2.99	1.77	1471.
130	4.99	32.98	129	26.10	193.2	3.19	2.02	1470.
140	4.92	33.20	139	26.28	176.1	3.37	2.28	1471.
150	4.92	33.35	149	26.40	165.0	3.54	2.53	1471.
160	4.79	33.51	159	26.54	151.7	3.70	2.78	1471.
170	4.75	33.65	169	26.66	140.5	3.84	3.02	1471.
180	4.63	33.73	179	26.73	133.7	3.98	3.27	1471.
190	4.64	33.77	189	26.76	130.9	4.11	3.52	1471.
200	4.57	33.80	199	26.79	128.2	4.24	3.77	1471.
210	4.52	33.83	209	26.82	125.3	4.37	4.04	1471.
220	4.49	33.84	218	26.84	123.9	4.49	4.31	1471.
230	4.43	33.86	228	26.86	122.2	4.62	4.59	1471.
240	4.40	33.88	238	26.88	120.7	4.74	4.88	1471.
250	4.34	33.89	248	26.89	119.0	4.86	5.18	1471.
260	4.23	33.91	258	26.92	116.7	4.98	5.49	1471.
270	4.17	33.91	268	26.93	116.1	5.09	5.80	1471.
280	4.13	33.92	278	26.94	114.8	5.21	6.13	1471.
290	4.10	33.94	288	26.96	113.4	5.32	6.46	1471.
300	4.09	33.95	298	26.97	112.6	5.43	6.80	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 44

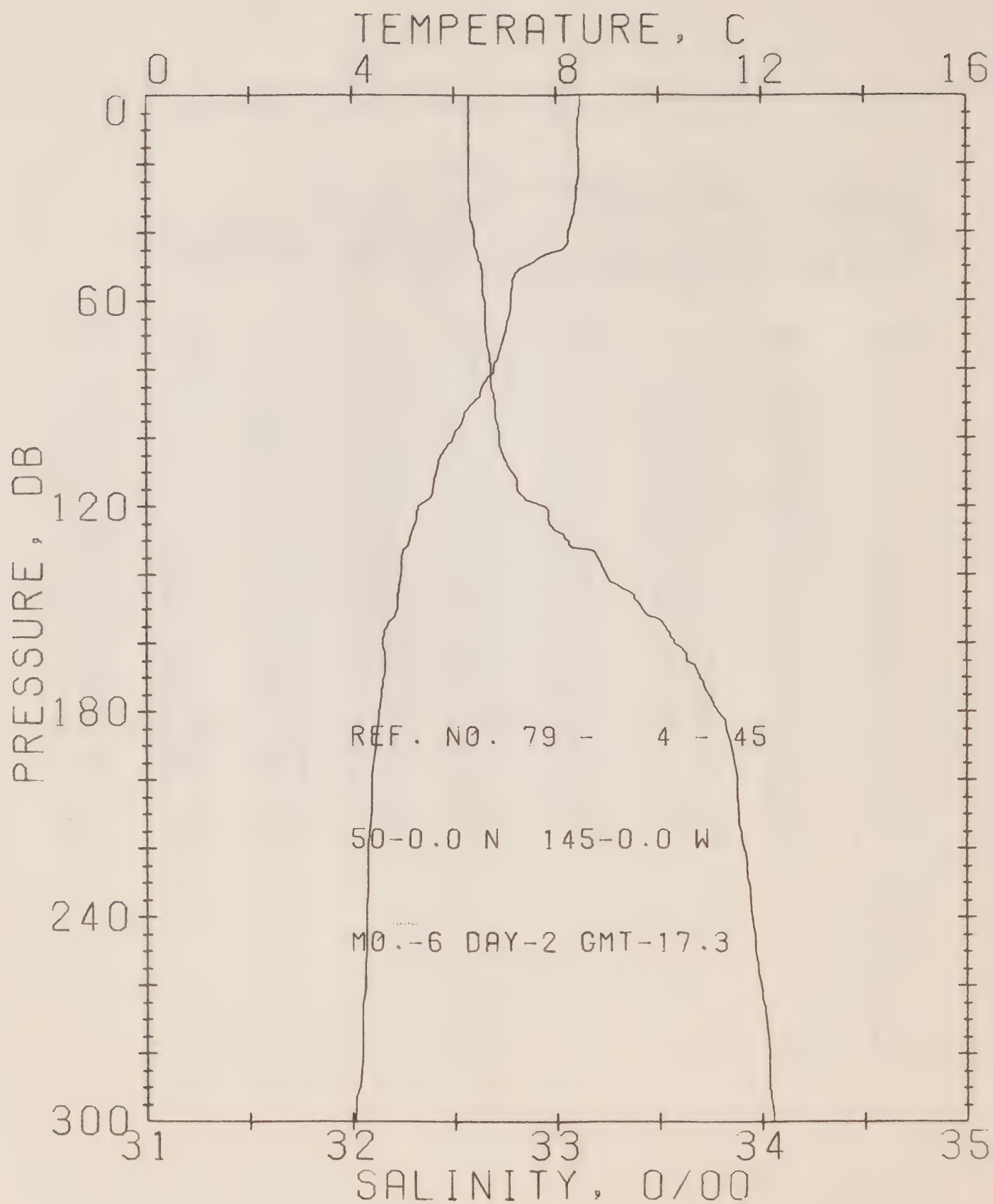
DATE 1/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 307 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.24	32.57	0	25.36	262.8	.00	.00	1481.
10	8.27	32.57	10	25.35	263.4	.26	.01	1481.
20	8.29	32.57	20	25.35	263.8	.53	.05	1481.
30	8.29	32.57	30	25.35	264.0	.79	.12	1481.
50	7.42	32.57	50	25.47	252.3	1.31	.33	1478.
75	6.95	32.58	75	25.55	245.8	1.94	.73	1477.
100	6.14	32.61	99	25.67	233.8	2.53	1.26	1474.
125	5.15	32.90	124	26.02	200.9	3.09	1.90	1471.
150	4.92	33.35	149	26.40	165.0	3.54	2.53	1471.
175	4.67	33.67	174	26.69	138.1	3.91	3.14	1471.
200	4.57	33.80	199	26.79	128.2	4.24	3.77	1471.
225	4.45	33.85	223	26.85	123.2	4.56	4.45	1471.
250	4.34	33.89	248	26.89	119.0	4.86	5.18	1471.
300	4.09	33.95	298	26.97	112.6	5.43	6.80	1471.
400	3.95	34.09	397	27.09	101.3	6.50	10.59	1472.
500	3.79	34.20	496	27.19	92.4	7.47	15.01	1473.
600	3.67	34.28	595	27.27	85.9	8.35	19.97	1474.
800	3.27	34.40	793	27.40	74.3	9.94	31.27	1476.
1000	2.98	34.45	990	27.47	68.5	11.36	44.28	1478.
1200	2.73	34.50	1188	27.53	63.5	12.68	59.05	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 45

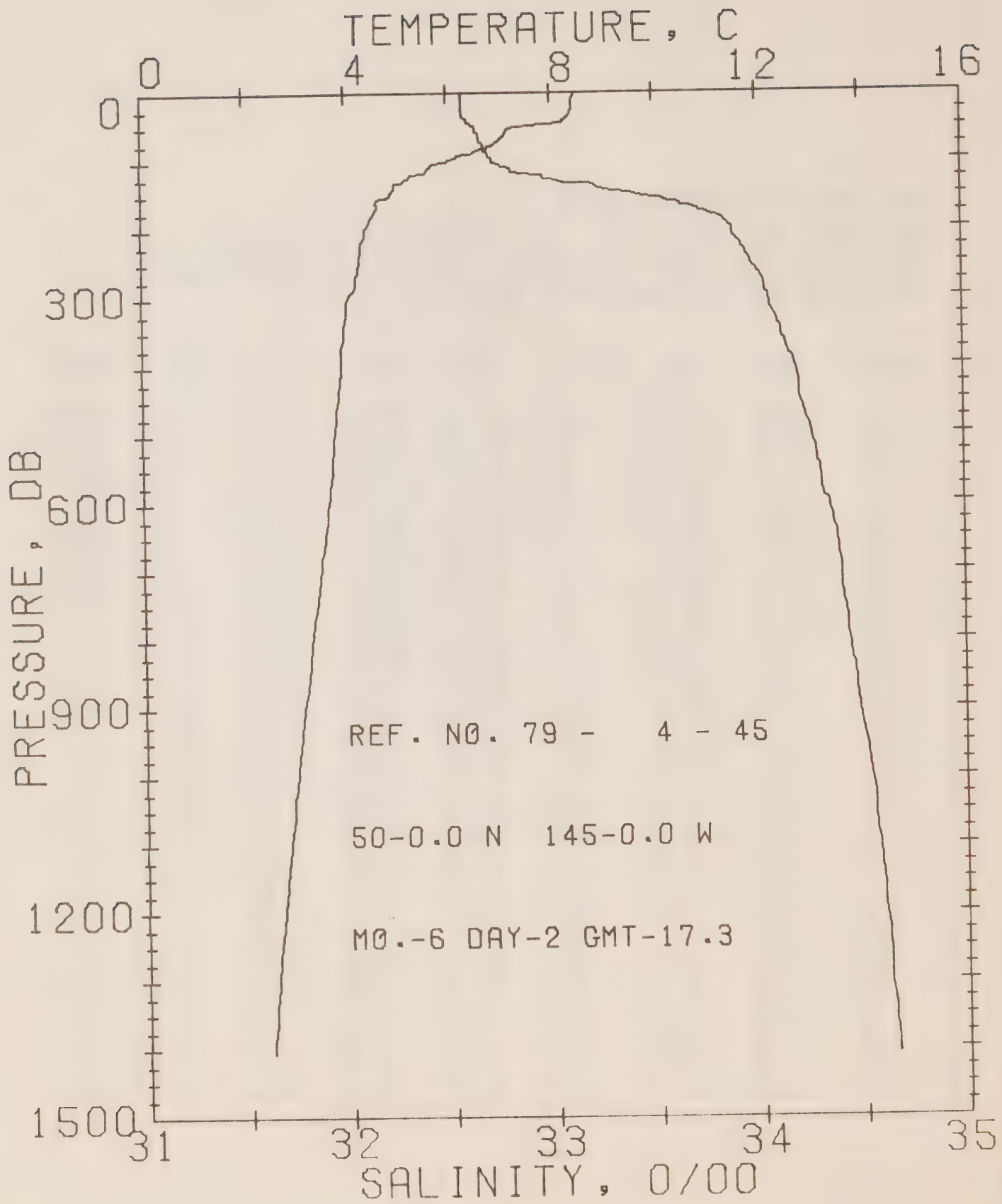
DATE 2/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.48	32.57	0	25.32	266.2	.00	.00	1482.
10	8.42	32.57	10	25.33	265.5	.27	.01	1482.
20	8.44	32.57	20	25.33	265.9	.53	.05	1482.
30	8.40	32.57	30	25.33	265.5	.80	.12	1482.
40	8.24	32.60	40	25.38	261.2	1.06	.22	1481.
50	7.39	32.63	50	25.52	247.4	1.32	.33	1478.
60	7.11	32.65	60	25.58	242.4	1.56	.47	1477.
70	6.98	32.65	70	25.60	240.5	1.80	.63	1477.
80	6.77	32.68	80	25.65	236.1	2.04	.81	1476.
90	6.36	32.70	89	25.72	229.6	2.27	1.01	1475.
100	5.98	32.72	99	25.78	223.6	2.50	1.23	1474.
110	5.64	32.79	109	25.87	214.8	2.72	1.47	1472.
120	5.28	32.95	119	26.04	198.6	2.93	1.72	1471.
130	5.11	33.06	129	26.15	188.6	3.13	1.96	1471.
140	4.95	33.24	139	26.31	173.4	3.31	2.21	1471.
150	4.87	33.42	149	26.46	159.2	3.47	2.45	1471.
160	4.58	33.57	159	26.61	144.9	3.62	2.69	1470.
170	4.60	33.70	169	26.71	135.5	3.76	2.93	1470.
180	4.52	33.79	179	26.79	128.0	3.89	3.16	1470.
190	4.44	33.85	189	26.85	122.6	4.02	3.40	1470.
200	4.38	33.88	199	26.88	120.0	4.14	3.64	1470.
210	4.36	33.89	209	26.89	119.1	4.26	3.89	1470.
220	4.30	33.91	218	26.92	116.7	4.38	4.15	1470.
230	4.29	33.94	228	26.93	115.1	4.49	4.41	1470.
240	4.28	33.95	238	26.95	113.6	4.61	4.69	1471.
250	4.26	33.97	248	26.96	112.4	4.72	4.97	1471.
260	4.23	34.00	258	26.99	110.3	4.83	5.26	1471.
270	4.18	34.01	268	27.01	108.4	4.94	5.55	1471.
280	4.18	34.03	278	27.02	107.4	5.05	5.86	1471.
290	4.13	34.03	288	27.02	106.9	5.16	6.17	1471.
300	4.02	34.05	298	27.05	104.4	5.26	6.48	1471.



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REFERENCE NO. 79- 4- 45

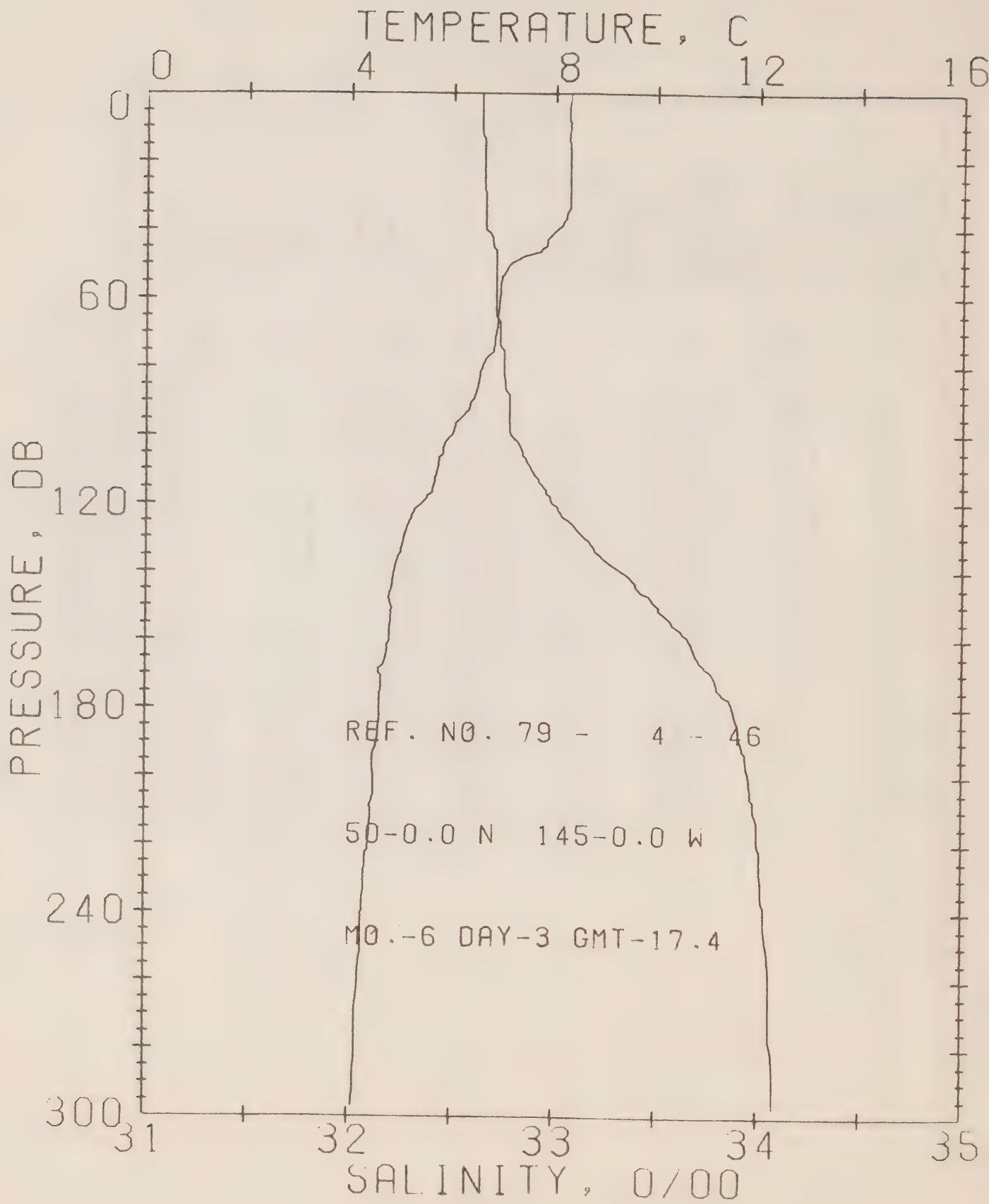
DATE 2/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 284 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.48	32.57	0	25.32	266.2	.00	.00	1482.
10	8.42	32.57	10	25.33	265.5	.27	.01	1482.
20	8.44	32.57	20	25.33	265.9	.53	.05	1482.
30	8.40	32.57	30	25.33	265.5	.80	.12	1482.
50	7.39	32.63	50	25.52	247.4	1.32	.33	1478.
75	6.88	32.67	75	25.63	238.2	1.92	.72	1477.
100	5.98	32.72	99	25.78	223.6	2.50	1.23	1474.
125	5.22	32.97	124	26.07	196.5	3.03	1.84	1471.
150	4.87	33.42	149	26.46	159.2	3.47	2.45	1471.
175	4.56	33.74	174	26.75	132.2	3.83	3.04	1470.
200	4.38	33.88	199	26.88	120.0	4.14	3.64	1470.
225	4.30	33.93	223	26.93	115.6	4.43	4.28	1470.
250	4.26	33.97	248	26.96	112.4	4.72	4.97	1471.
300	4.02	34.05	298	27.05	104.4	5.26	6.48	1471.
400	3.89	34.18	397	27.17	94.1	6.25	10.02	1472.
500	3.74	34.26	496	27.25	87.4	7.17	14.20	1473.
600	3.62	34.34	595	27.32	80.7	8.01	18.94	1474.
800	3.27	34.44	793	27.43	71.5	9.53	29.71	1476.
1000	2.94	34.53	990	27.54	62.2	10.86	41.92	1478.
1200	2.66	34.60	1188	27.62	55.6	12.03	55.04	1480.



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REFERENCE NO. 79- 4- 46

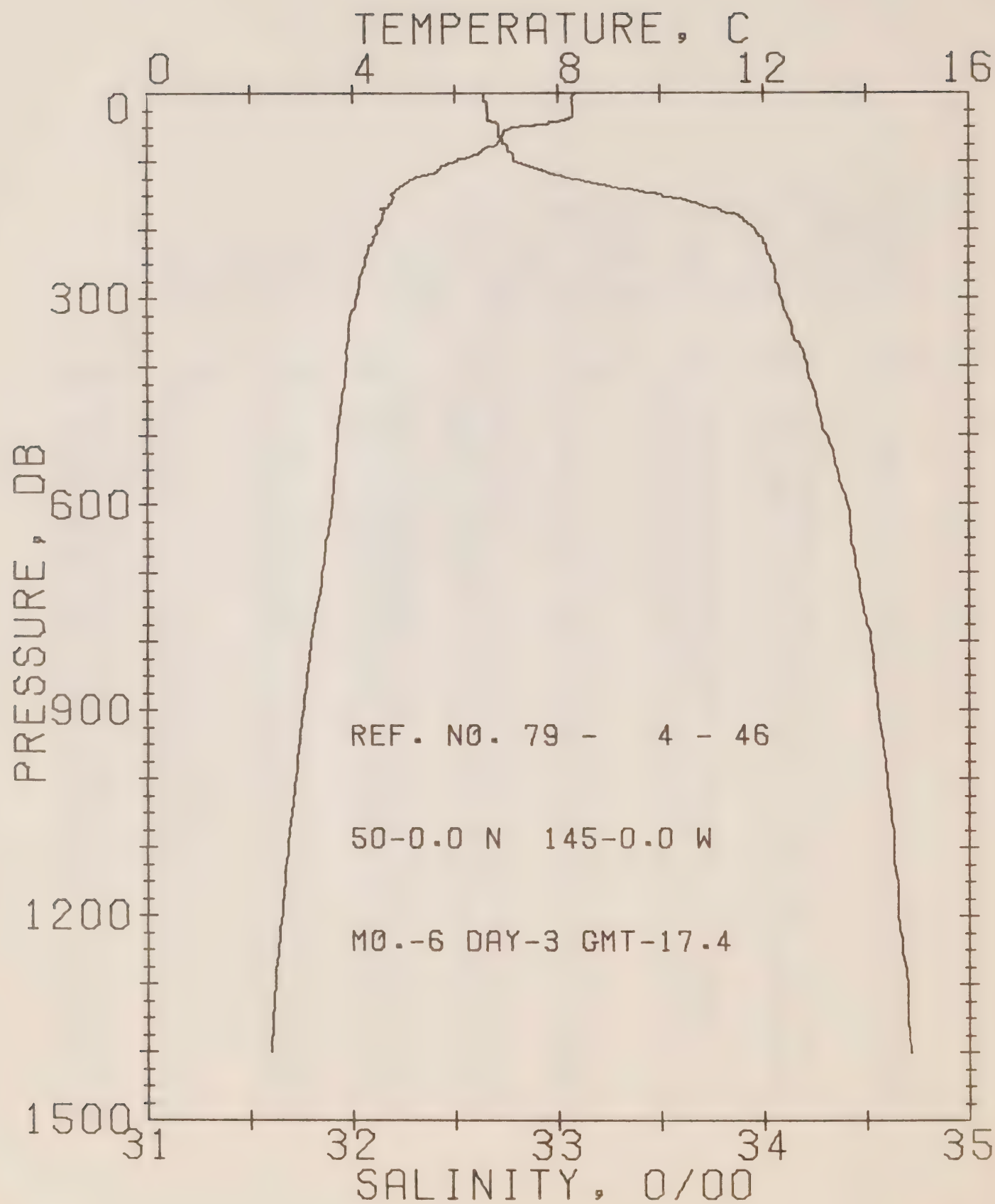
DATE 3/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 190 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.31	32.64	0	25.40	258.6	.00	.00	1481.
10	8.29	32.64	10	25.40	258.4	.26	.01	1481.
20	8.29	32.65	20	25.41	257.9	.52	.05	1481.
30	8.30	32.66	30	25.42	257.4	.77	.12	1482.
40	8.06	32.66	40	25.45	254.2	1.03	.21	1481.
50	7.15	32.71	50	25.62	238.3	1.28	.32	1477.
60	6.93	32.71	60	25.65	235.6	1.51	.46	1477.
70	6.85	32.73	70	25.68	233.2	1.75	.61	1477.
80	6.59	32.75	80	25.73	228.6	1.98	.79	1476.
90	6.39	32.78	89	25.78	224.0	2.21	.98	1475.
100	6.00	32.79	99	25.83	218.7	2.43	1.20	1474.
110	5.70	32.89	109	25.95	207.8	2.64	1.43	1473.
120	5.42	32.99	119	26.06	197.2	2.84	1.66	1472.
130	5.06	33.15	129	26.23	181.3	3.03	1.90	1471.
140	4.87	33.34	139	26.40	165.4	3.21	2.14	1471.
150	4.81	33.51	149	26.54	151.8	3.36	2.38	1471.
160	4.77	33.66	159	26.66	140.2	3.51	2.61	1471.
170	4.57	33.78	169	26.78	129.2	3.65	2.84	1470.
180	4.59	33.88	179	26.86	122.0	3.77	3.06	1471.
190	4.53	33.92	189	26.89	118.5	3.89	3.29	1471.
200	4.47	33.96	199	26.93	114.9	4.01	3.52	1471.
210	4.42	33.98	209	26.95	113.0	4.12	3.76	1471.
220	4.38	34.00	218	26.97	111.2	4.23	4.00	1471.
230	4.30	34.01	228	26.99	109.3	4.34	4.25	1471.
240	4.28	34.03	238	27.01	108.1	4.45	4.51	1471.
250	4.24	34.05	248	27.02	106.6	4.56	4.78	1471.
260	4.18	34.06	258	27.04	104.9	4.67	5.06	1471.
270	4.12	34.06	268	27.05	104.4	4.77	5.34	1471.
280	4.12	34.07	278	27.06	103.9	4.88	5.63	1471.
290	4.11	34.08	288	27.07	103.0	4.98	5.93	1471.
300	4.06	34.08	298	27.08	102.1	5.08	6.24	1471.



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REFERENCE NO. 79- 4- 46

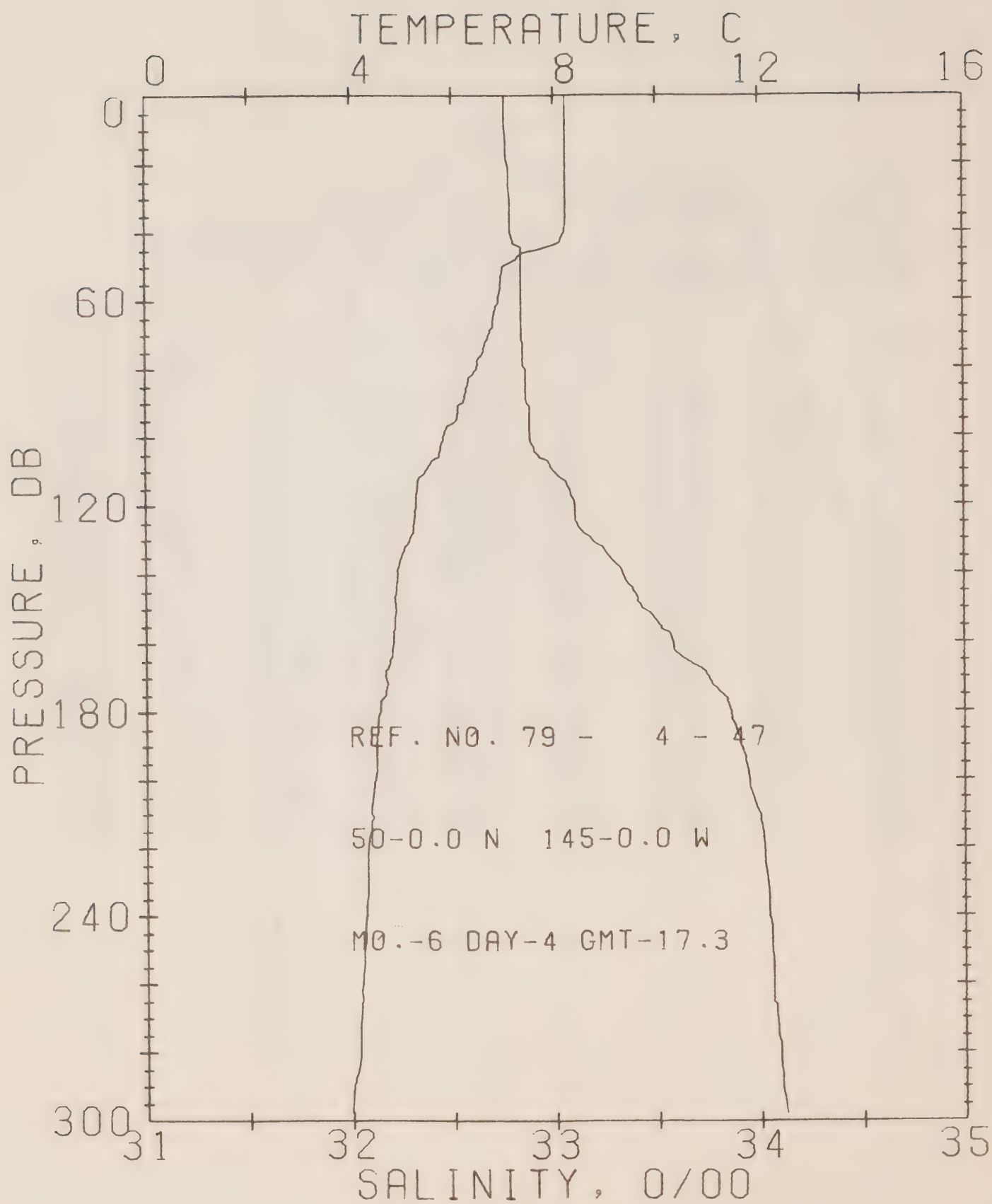
DATE 3/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 320 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.31	32.64	0	25.40	258.6	.00	.00	1481.
10	8.29	32.64	10	25.40	258.4	.26	.01	1481.
20	8.29	32.65	20	25.41	257.9	.52	.05	1481.
30	8.30	32.66	30	25.42	257.4	.77	.12	1482.
50	7.15	32.71	50	25.62	238.3	1.28	.32	1477.
75	6.80	32.75	75	25.70	231.2	1.86	.70	1477.
100	6.00	32.79	99	25.83	218.7	2.43	1.20	1474.
125	5.17	33.07	124	26.15	188.4	2.94	1.78	1471.
150	4.81	33.51	149	26.54	151.8	3.36	2.38	1471.
175	4.60	33.82	174	26.81	126.6	3.71	2.95	1471.
200	4.47	33.96	199	26.93	114.9	4.01	3.52	1471.
225	4.33	34.01	223	26.99	109.9	4.29	4.13	1471.
250	4.24	34.05	248	27.02	106.6	4.56	4.78	1471.
300	4.06	34.08	298	27.08	102.1	5.08	6.24	1471.
400	3.88	34.21	397	27.19	91.7	6.05	9.68	1472.
500	3.71	34.31	496	27.29	83.3	6.93	13.70	1473.
600	3.59	34.41	595	27.38	75.4	7.72	18.15	1474.
800	3.18	34.52	793	27.51	64.3	9.13	28.14	1476.
1000	2.87	34.60	990	27.60	56.4	10.34	39.21	1478.
1200	2.60	34.65	1188	27.67	50.8	11.40	51.13	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 47

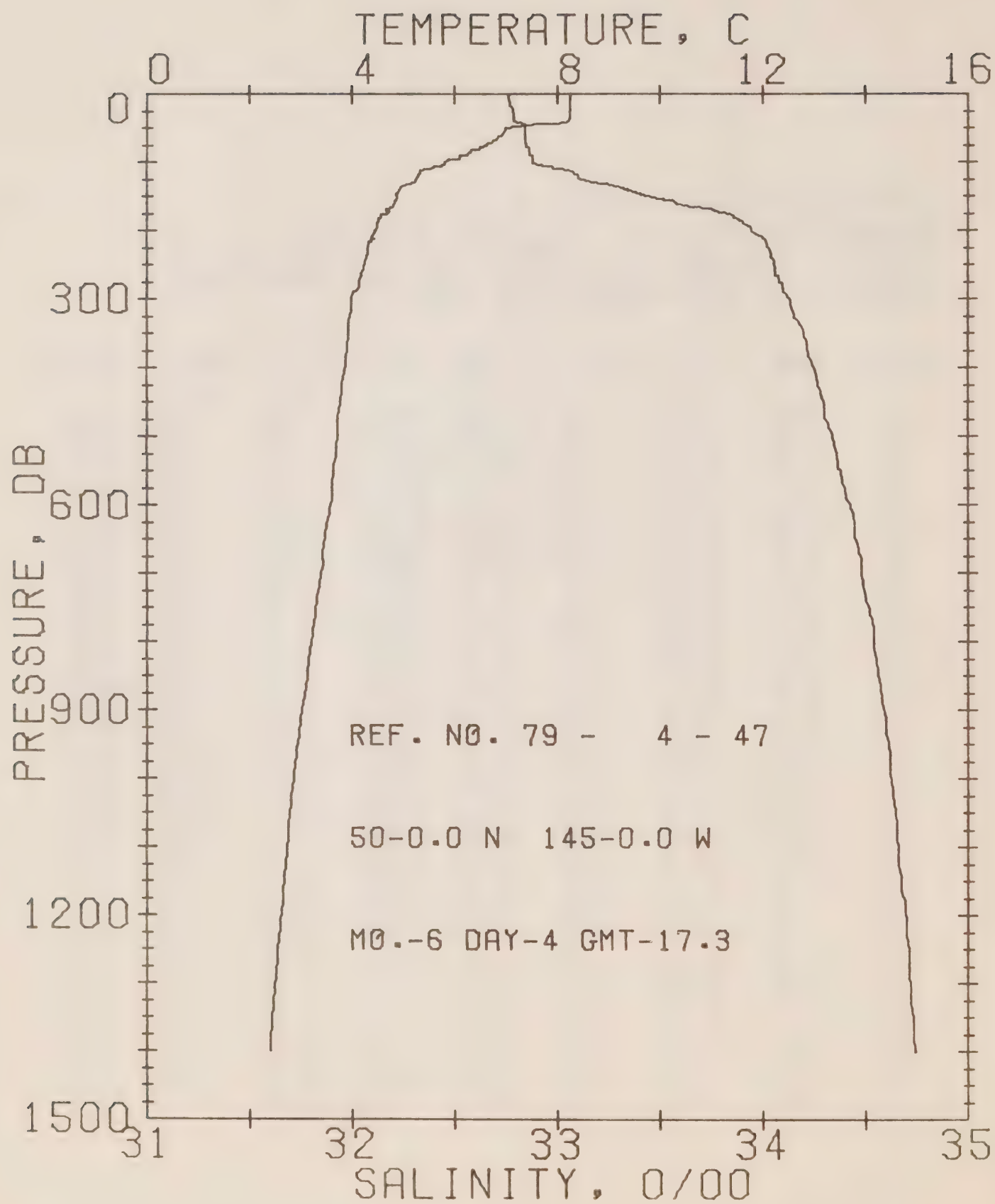
DATE 4/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.24	32.76	0	25.50	248.6	.00	.00	1481.
10	8.23	32.76	10	25.51	248.5	.25	.01	1481.
20	8.24	32.78	20	25.52	247.7	.50	.05	1481.
30	8.24	32.79	30	25.53	246.9	.74	.11	1481.
40	8.20	32.79	40	25.53	246.5	.99	.20	1481.
50	6.99	32.84	50	25.74	226.6	1.23	.31	1477.
60	6.91	32.84	60	25.76	225.6	1.45	.44	1477.
70	6.71	32.84	70	25.78	223.3	1.68	.59	1476.
80	6.49	32.86	79	25.83	219.1	1.90	.75	1476.
90	6.21	32.87	89	25.87	215.1	2.12	.94	1475.
100	5.82	32.88	99	25.93	209.8	2.33	1.15	1473.
110	5.46	32.99	109	26.06	197.2	2.53	1.37	1472.
120	5.28	33.10	119	26.16	187.4	2.72	1.59	1472.
130	5.15	33.18	129	26.24	180.0	2.91	1.83	1471.
140	4.91	33.34	139	26.39	165.8	3.08	2.06	1471.
150	4.87	33.43	149	26.47	158.4	3.24	2.30	1471.
160	4.82	33.58	159	26.59	146.8	3.39	2.54	1471.
170	4.68	33.75	169	26.74	132.6	3.54	2.78	1471.
180	4.55	33.86	179	26.85	123.1	3.66	3.01	1471.
190	4.49	33.91	169	26.89	118.8	3.78	3.23	1471.
200	4.45	33.95	199	26.93	115.5	3.90	3.47	1471.
210	4.36	34.00	209	26.98	110.9	4.01	3.70	1470.
220	4.31	34.02	218	27.00	109.1	4.12	3.94	1470.
230	4.29	34.03	228	27.01	108.1	4.23	4.19	1471.
240	4.26	34.04	238	27.02	107.1	4.34	4.45	1471.
250	4.21	34.05	248	27.03	105.9	4.45	4.72	1471.
260	4.18	34.06	258	27.04	104.9	4.55	4.99	1471.
270	4.15	34.07	268	27.06	103.7	4.66	5.27	1471.
280	4.12	34.09	278	27.07	102.2	4.76	5.56	1471.
290	4.01	34.10	288	27.09	100.4	4.86	5.86	1470.
300	3.97	34.12	298	27.12	98.3	4.96	6.15	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 47

DATE 4/ 6/79

POSITION 50- .0N, 145- .0W

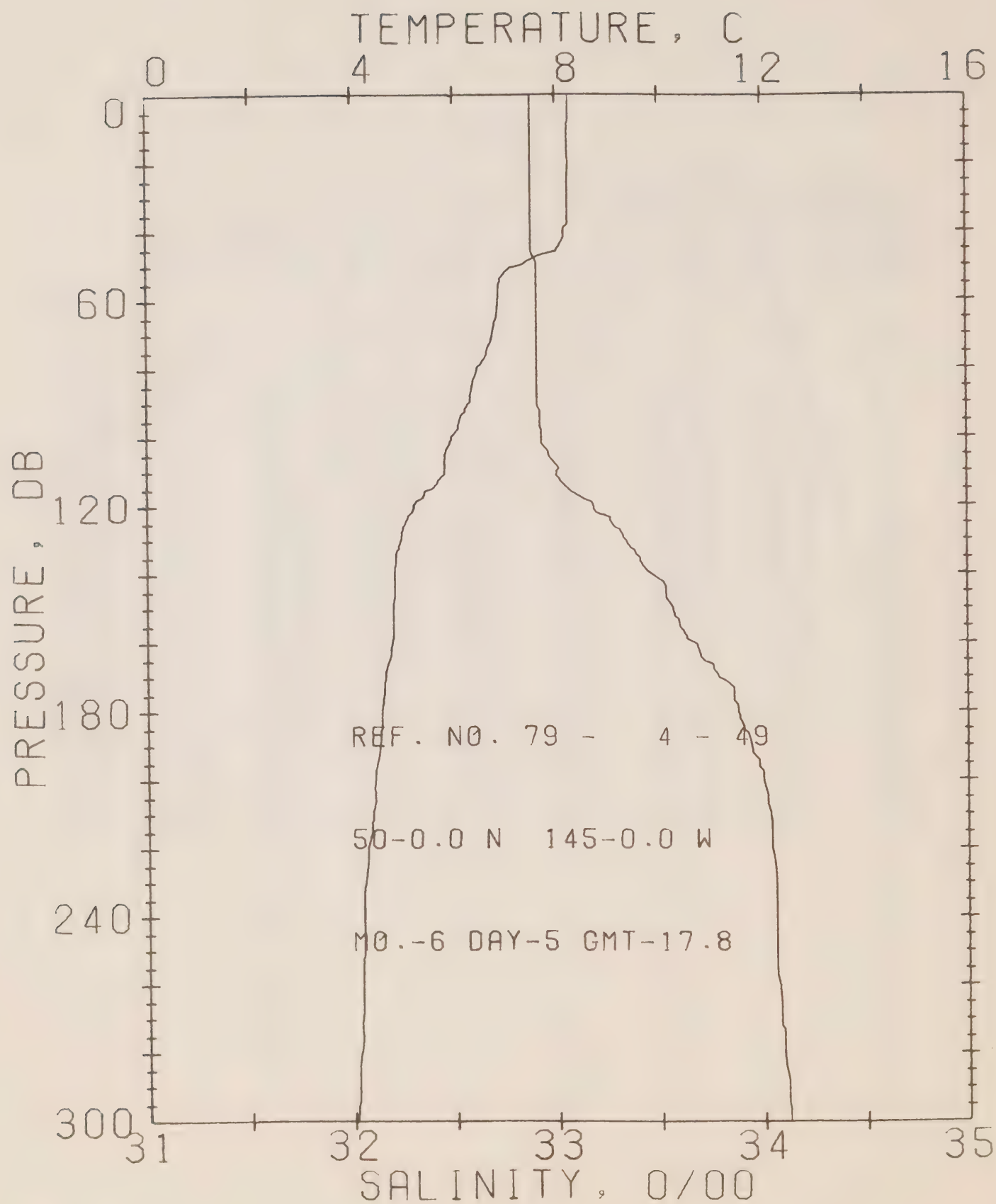
GMT 17.3

STATION P

RESULTS OF STP CAST 309 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.24	32.76	0	25.50	248.6	.00	.00	1481.
10	8.23	32.76	10	25.51	248.5	.25	.01	1481.
20	8.24	32.78	20	25.52	247.7	.50	.05	1481.
30	8.24	32.79	30	25.53	246.9	.74	.11	1481.
50	6.99	32.84	50	25.74	226.6	1.23	.31	1477.
75	6.61	32.85	75	25.80	221.3	1.79	.67	1476.
100	5.82	32.88	99	25.93	209.8	2.33	1.15	1473.
125	5.24	33.11	124	26.17	186.6	2.82	1.71	1472.
150	4.87	33.43	149	26.47	158.4	3.24	2.30	1471.
175	4.67	33.83	174	26.81	126.6	3.60	2.89	1471.
200	4.45	33.95	199	26.93	115.5	3.90	3.47	1471.
225	4.30	34.02	223	27.00	108.7	4.18	4.07	1470.
250	4.21	34.05	248	27.03	105.9	4.45	4.72	1471.
300	3.97	34.12	298	27.12	98.3	4.96	6.15	1470.
400	3.86	34.24	397	27.22	89.0	5.90	9.48	1472.
500	3.71	34.34	496	27.31	81.0	6.74	13.37	1473.
600	3.57	34.43	595	27.40	73.7	7.52	17.73	1474.
800	3.20	34.54	793	27.52	63.0	8.89	27.43	1476.
1000	2.85	34.62	990	27.62	54.5	10.06	38.12	1478.
1200	2.61	34.69	1188	27.70	47.7	11.08	49.58	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 49

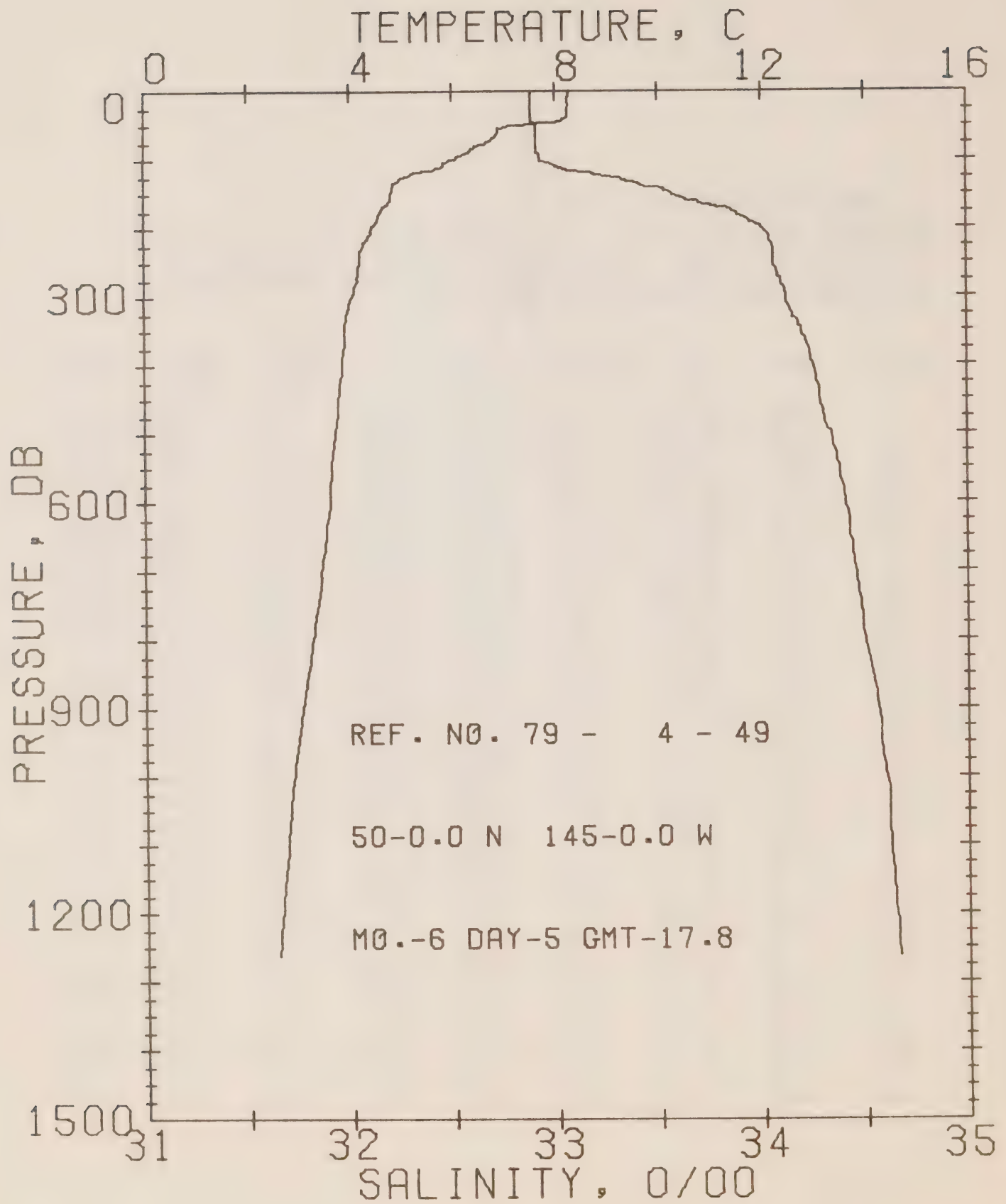
DATE 5/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.8 STATION P

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.27	32.88	0	25.59	240.1	.00	.00	1481.
10	8.25	32.88	10	25.60	240.0	.24	.01	1481.
20	8.26	32.88	20	25.60	240.3	.48	.05	1481.
30	8.24	32.88	30	25.60	240.2	.72	.11	1482.
40	8.15	32.88	40	25.61	239.1	.96	.20	1481.
50	7.32	32.91	50	25.75	225.7	1.20	.30	1478.
60	6.87	32.91	60	25.82	219.9	1.42	.43	1477.
70	6.77	32.91	70	25.83	218.8	1.64	.57	1477.
80	6.45	32.91	79	25.87	214.9	1.85	.74	1475.
90	6.31	32.91	89	25.89	213.3	2.07	.92	1475.
100	5.96	32.93	99	25.95	207.7	2.28	1.13	1474.
110	5.81	33.00	109	26.02	200.8	2.48	1.35	1473.
120	5.21	33.18	119	26.23	180.6	2.67	1.57	1471.
130	4.95	33.34	129	26.39	165.9	2.85	1.79	1471.
140	4.83	33.47	139	26.51	154.9	3.01	2.01	1471.
150	4.81	33.57	149	26.58	147.7	3.16	2.23	1471.
160	4.77	33.68	159	26.68	138.7	3.30	2.46	1471.
170	4.64	33.79	169	26.78	129.2	3.44	2.69	1471.
180	4.57	33.88	179	26.86	121.8	3.56	2.91	1471.
190	4.52	33.94	189	26.92	116.6	3.68	3.13	1471.
200	4.42	34.00	199	26.97	111.4	3.79	3.36	1471.
210	4.38	34.03	208	27.00	108.8	3.90	3.59	1471.
220	4.28	34.04	218	27.02	107.1	4.01	3.83	1470.
230	4.22	34.06	228	27.04	105.2	4.12	4.07	1470.
240	4.18	34.06	238	27.04	104.8	4.22	4.32	1470.
250	4.18	34.06	248	27.04	104.9	4.33	4.58	1470.
260	4.16	34.07	258	27.05	104.0	4.43	4.85	1471.
270	4.15	34.08	268	27.06	103.2	4.54	5.13	1471.
280	4.12	34.09	278	27.07	102.2	4.64	5.42	1471.
290	4.08	34.11	288	27.09	100.4	4.74	5.72	1471.
300	4.03	34.12	298	27.11	99.2	4.84	6.02	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 49

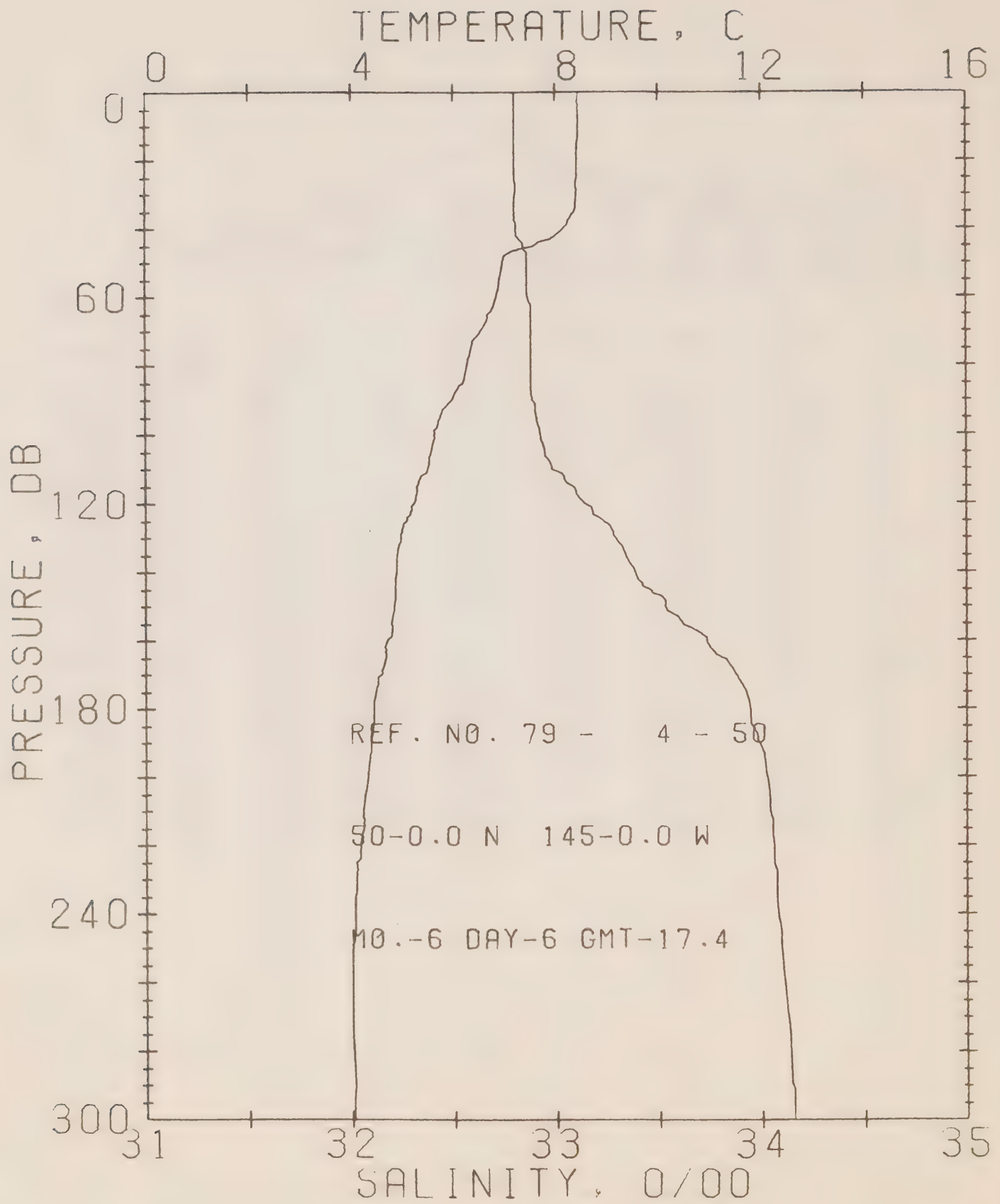
DATE 5/ 6/79

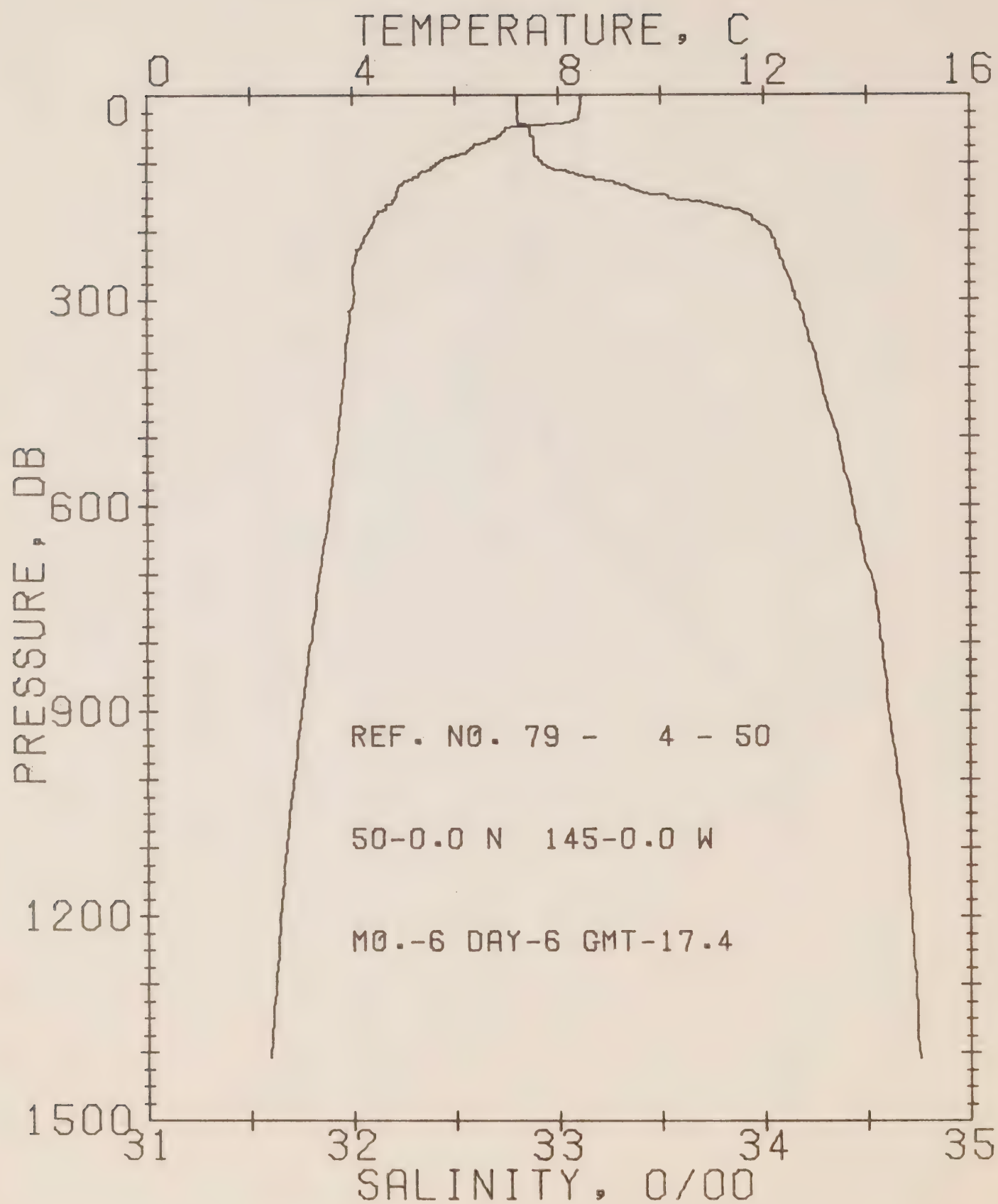
POSITION 50- .0N, 145- .0W GMT 17.8 STATION P

RESULTS OF STP CAST 297 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.27	32.88	0	25.59	240.1	.00	.00	1481.
10	8.25	32.88	10	25.60	240.0	.24	.01	1481.
20	8.26	32.88	20	25.60	240.3	.48	.05	1481.
30	8.24	32.88	30	25.60	240.2	.72	.11	1482.
50	7.32	32.91	50	25.75	225.7	1.20	.30	1478.
75	6.64	32.91	75	25.85	217.2	1.75	.65	1476.
100	5.96	32.93	99	25.95	207.7	2.28	1.13	1474.
125	5.03	33.27	124	26.33	171.9	2.76	1.68	1471.
150	4.81	33.57	149	26.58	147.7	3.16	2.23	1471.
175	4.60	33.86	174	26.84	123.6	3.50	2.80	1471.
200	4.42	34.00	199	26.97	111.4	3.79	3.36	1471.
225	4.25	34.05	223	27.03	106.0	4.06	3.95	1470.
250	4.18	34.06	248	27.04	104.9	4.33	4.58	1470.
300	4.03	34.12	298	27.11	99.2	4.84	6.02	1471.
400	3.84	34.25	397	27.23	88.7	5.77	9.34	1472.
500	3.71	34.34	496	27.31	81.1	6.63	13.25	1473.
600	3.59	34.41	595	27.38	75.5	7.41	17.62	1474.
800	3.24	34.50	793	27.49	66.5	8.83	27.72	1476.
1000	2.86	34.60	990	27.60	56.5	10.05	38.88	1478.
1200	2.62	34.64	1188	27.66	51.5	11.13	50.97	1480.





OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 50

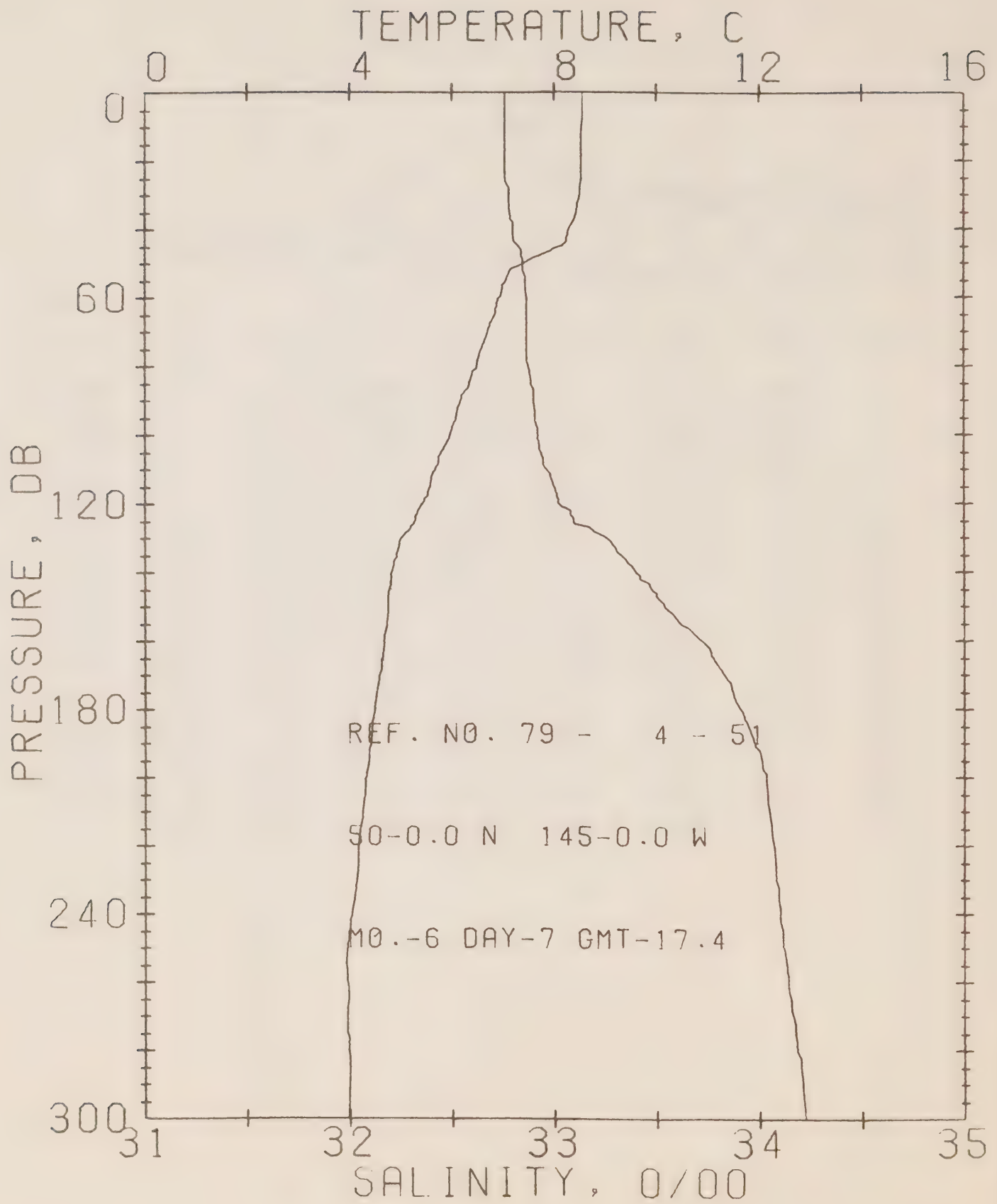
DATE 6/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 253 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.46	32.80	0	25.50	248.8	.00	.00	1482.
10	8.45	32.80	10	25.50	248.8	.25	.01	1482.
20	8.43	32.80	20	25.51	248.7	.50	.05	1482.
30	8.42	32.81	30	25.51	248.2	.75	.11	1482.
50	6.97	32.86	50	25.76	224.8	1.23	.31	1477.
75	6.36	32.88	75	25.86	216.0	1.78	.66	1475.
100	5.63	32.92	99	25.98	204.2	2.31	1.13	1472.
125	5.06	33.23	124	26.29	175.2	2.79	1.68	1471.
150	4.84	33.53	149	26.55	150.6	3.19	2.25	1471.
175	4.47	33.92	174	26.91	117.3	3.52	2.79	1470.
200	4.30	34.03	199	27.00	108.3	3.81	3.33	1470.
225	4.09	34.06	223	27.05	103.7	4.07	3.91	1470.
250	4.00	34.09	248	27.09	100.6	4.33	4.52	1470.
300	4.02	34.15	298	27.13	96.9	4.82	5.90	1471.
400	3.84	34.26	397	27.24	87.6	5.73	9.16	1472.
500	3.70	34.36	496	27.33	79.6	6.57	12.99	1473.
600	3.55	34.43	595	27.40	73.3	7.34	17.27	1474.
800	3.17	34.56	793	27.54	60.9	8.66	26.71	1476.
1000	2.84	34.65	990	27.64	52.7	9.80	37.10	1478.
1200	2.57	34.71	1188	27.71	46.3	10.78	48.04	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 51

DATE 7/ 6/79

POSITION 50- .0N, 145- .0W

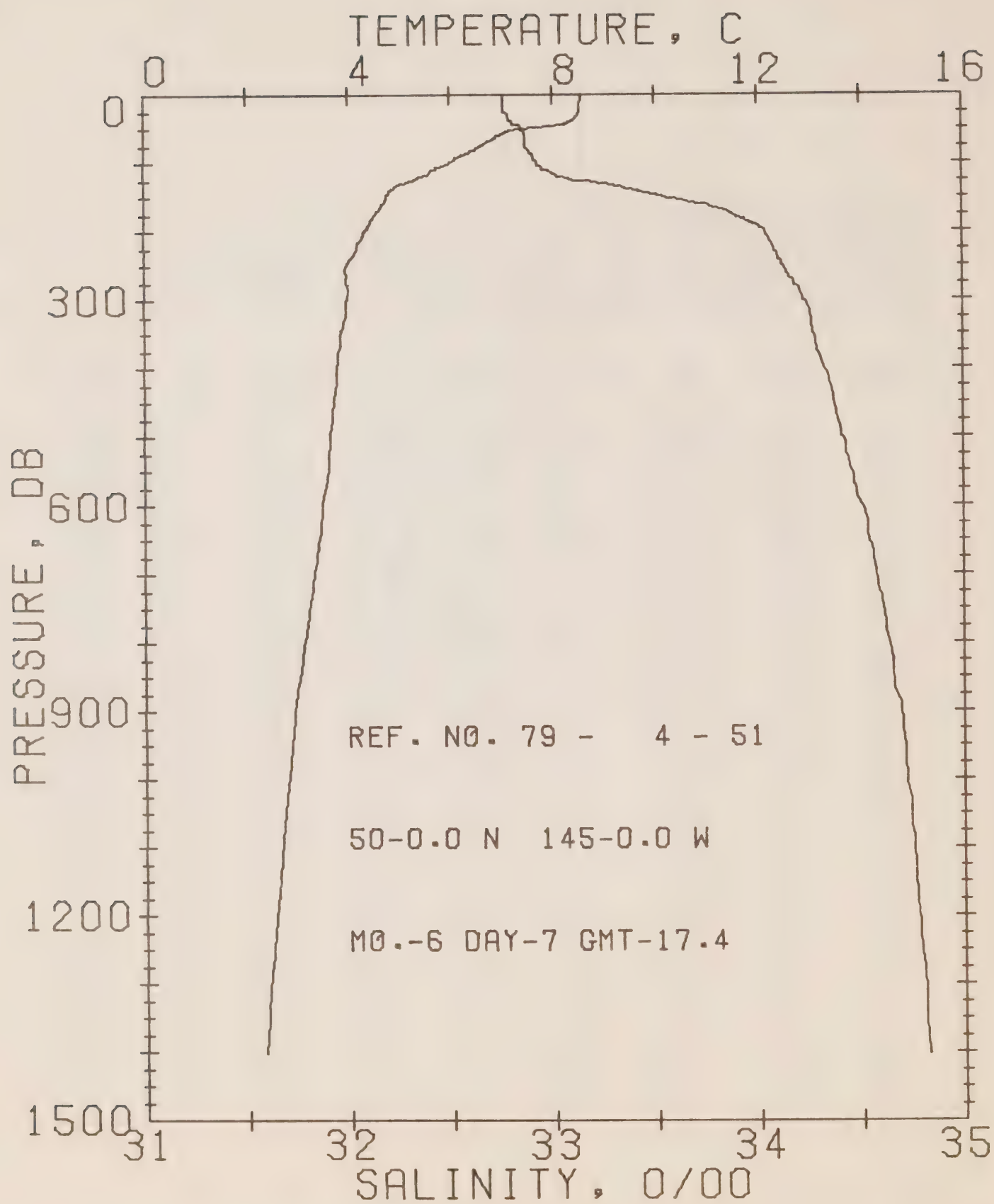
GMT 17.4

STATION P

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.55	32.76	0	25.46	253.1	.00	.00	1482.
10	8.54	32.76	10	25.46	253.1	.25	.01	1482.
20	8.54	32.76	20	25.46	253.2	.51	.05	1482.
30	8.50	32.78	30	25.48	251.3	.76	.12	1482.
40	8.29	32.80	40	25.53	247.1	1.01	.21	1482.
50	7.43	32.85	50	25.69	231.6	1.25	.32	1479.
60	6.95	32.87	60	25.77	224.0	1.48	.44	1477.
70	6.71	32.87	70	25.81	221.0	1.70	.59	1476.
80	6.49	32.87	79	25.84	218.0	1.92	.76	1476.
90	6.18	32.90	89	25.90	212.5	2.13	.94	1474.
100	5.97	32.92	99	25.94	208.6	2.34	1.15	1474.
110	5.68	32.96	109	26.00	202.3	2.55	1.37	1473.
120	5.44	33.02	119	26.08	195.2	2.75	1.60	1472.
130	5.01	33.26	129	26.32	172.5	2.93	1.84	1471.
140	4.84	33.40	139	26.45	160.3	3.10	2.06	1470.
150	4.75	33.54	149	26.57	148.9	3.25	2.29	1470.
160	4.67	33.72	159	26.72	134.7	3.40	2.52	1471.
170	4.58	33.83	169	26.82	125.6	3.53	2.73	1470.
180	4.49	33.91	179	26.89	118.7	3.65	2.95	1470.
190	4.40	33.98	189	26.95	112.9	3.76	3.17	1470.
200	4.32	34.03	199	27.00	108.1	3.87	3.39	1470.
210	4.25	34.05	209	27.03	106.2	3.98	3.61	1470.
220	4.17	34.07	218	27.05	103.9	4.09	3.84	1470.
230	4.14	34.08	228	27.06	102.8	4.19	4.08	1470.
240	4.03	34.10	238	27.09	100.2	4.29	4.32	1470.
250	3.94	34.12	248	27.12	97.9	4.39	4.57	1469.
260	3.96	34.14	258	27.13	96.7	4.49	4.82	1470.
270	3.95	34.16	268	27.15	95.1	4.58	5.08	1470.
280	3.98	34.18	278	27.16	94.1	4.68	5.35	1470.
290	3.99	34.21	288	27.18	92.1	4.77	5.62	1470.
300	3.98	34.22	298	27.19	91.2	4.86	5.89	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 51

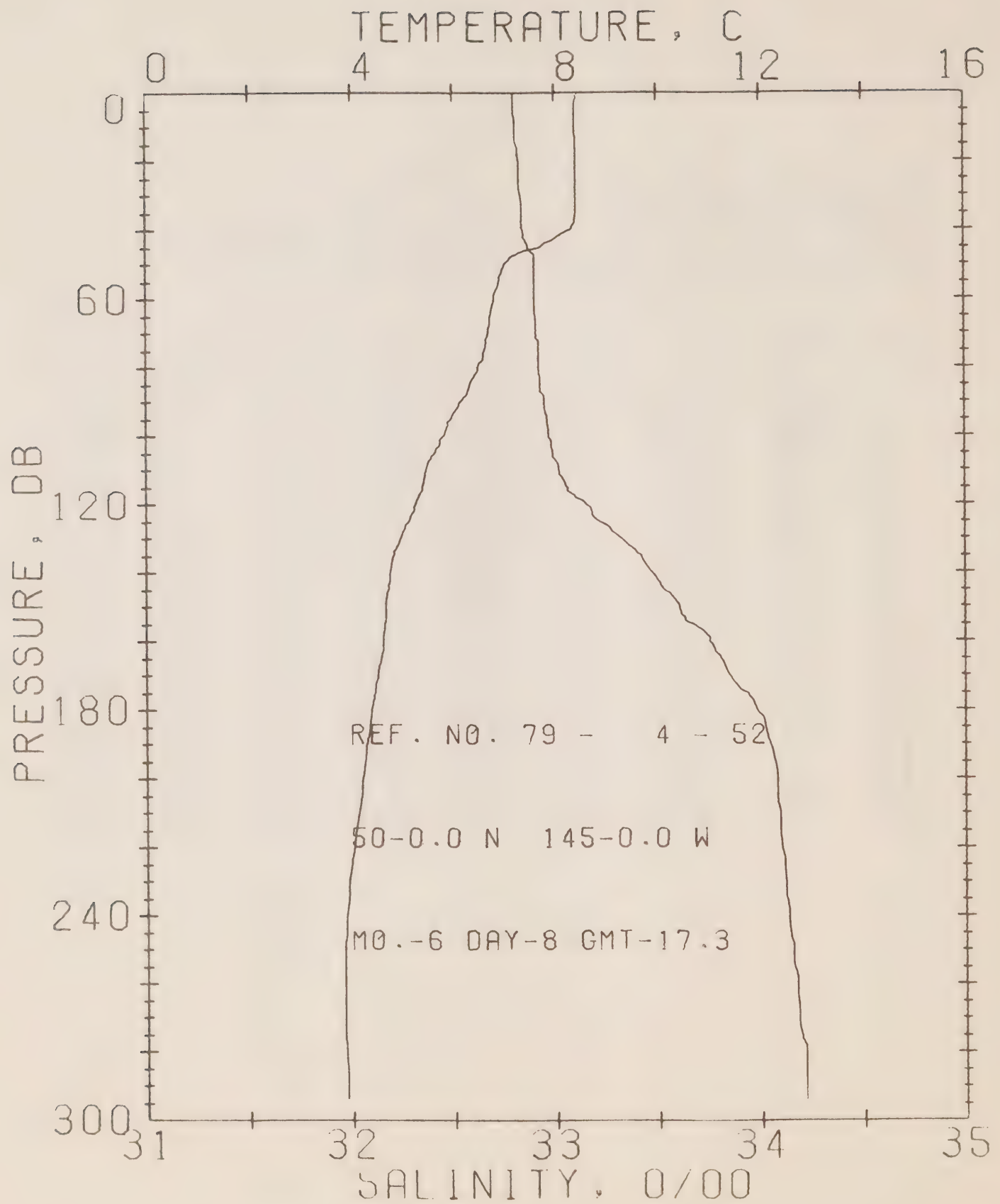
DATE 7/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 277 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.55	32.76	0	25.46	253.1	.00	.00	1482.
10	8.54	32.76	10	25.46	253.1	.25	.01	1482.
20	8.54	32.76	20	25.46	253.2	.51	.05	1482.
30	8.50	32.78	30	25.48	251.3	.76	.12	1482.
50	7.43	32.85	50	25.69	231.6	1.25	.32	1479.
75	6.60	32.87	75	25.82	219.6	1.81	.67	1476.
100	5.97	32.92	99	25.94	208.6	2.34	1.15	1474.
125	5.29	33.09	124	26.15	188.3	2.84	1.72	1472.
150	4.75	33.54	149	26.57	148.9	3.25	2.29	1470.
175	4.52	33.87	174	26.86	121.8	3.59	2.84	1470.
200	4.32	34.03	199	27.00	108.1	3.87	3.39	1470.
225	4.15	34.08	223	27.06	103.0	4.14	3.96	1470.
250	3.94	34.12	248	27.12	97.9	4.39	4.57	1469.
300	3.98	34.22	298	27.19	91.2	4.86	5.89	1471.
400	3.77	34.32	397	27.29	82.5	5.73	8.97	1472.
500	3.64	34.41	496	27.38	75.0	6.51	12.55	1473.
600	3.47	34.50	595	27.47	67.1	7.22	16.55	1474.
800	3.10	34.64	793	27.61	54.9	8.44	25.21	1476.
1000	2.79	34.72	990	27.70	46.6	9.45	34.39	1478.
1200	2.53	34.78	1187	27.77	40.8	10.32	44.13	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 52

DATE 8/ 6/79

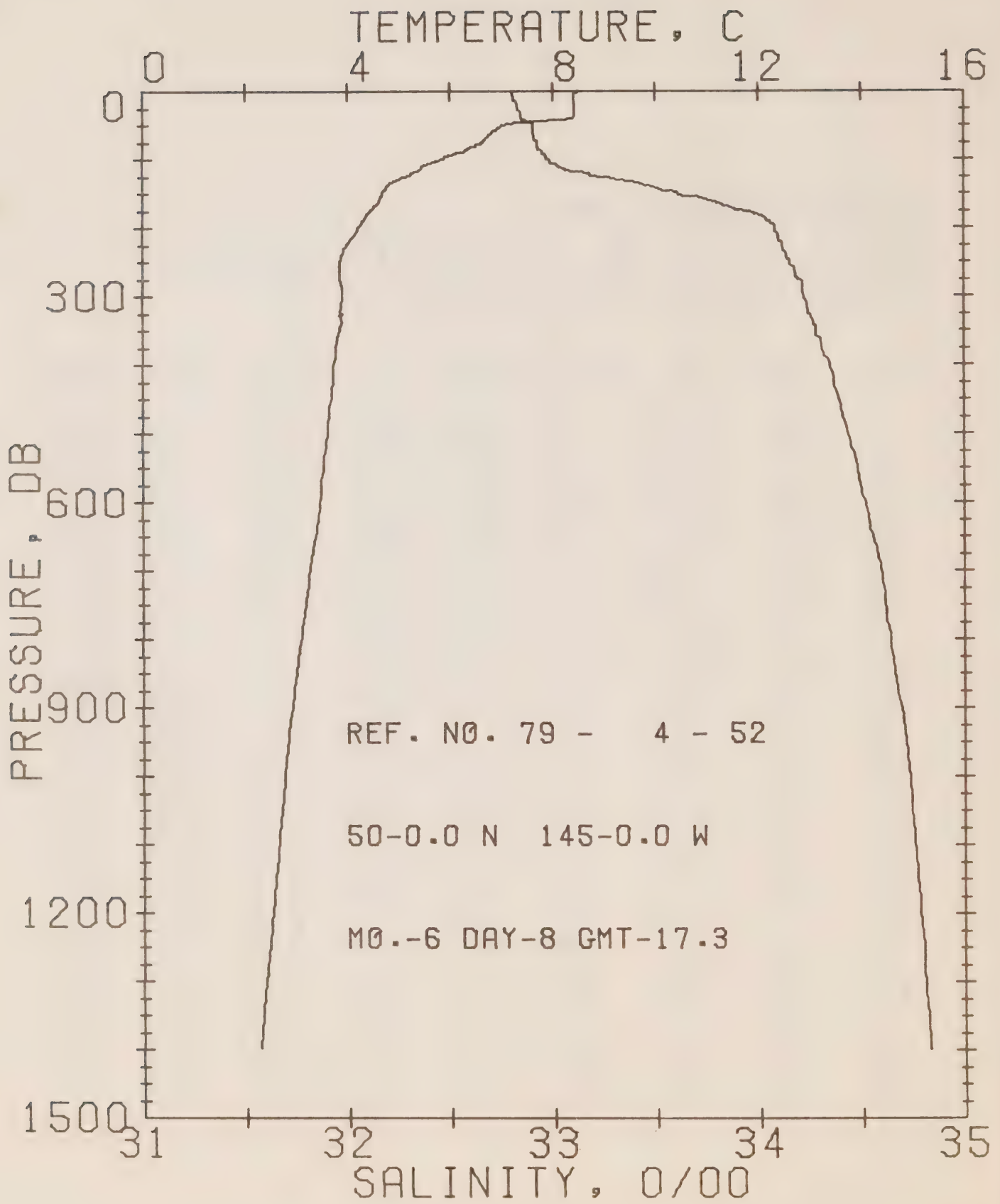
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 170 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.48	32.80	0	25.50	249.1	.00	.00	1482.
10	8.41	32.81	10	25.52	247.5	.25	.01	1482.
20	8.42	32.83	20	25.53	246.3	.50	.05	1482.
30	8.42	32.84	30	25.54	246.1	.74	.11	1482.
40	8.31	32.85	40	25.56	243.6	.99	.20	1482.
50	7.02	32.90	50	25.79	222.5	1.22	.31	1477.
60	6.81	32.90	60	25.82	219.9	1.44	.43	1476.
70	6.69	32.91	70	25.84	217.7	1.66	.58	1476.
80	6.49	32.92	79	25.87	214.7	1.88	.74	1476.
90	6.14	32.95	89	25.94	208.3	2.09	.92	1474.
100	5.80	32.97	99	26.00	202.8	2.29	1.12	1473.
110	5.46	33.02	109	26.08	195.5	2.49	1.34	1472.
120	5.25	33.15	119	26.21	183.3	2.68	1.56	1472.
130	4.96	33.33	129	26.38	166.7	2.86	1.78	1471.
140	4.77	33.48	139	26.52	153.7	3.02	2.00	1470.
150	4.67	33.61	149	26.63	143.2	3.17	2.22	1470.
160	4.62	33.75	159	26.75	131.9	3.30	2.44	1470.
170	4.51	33.85	169	26.84	123.3	3.43	2.65	1470.
180	4.38	33.98	179	26.96	112.3	3.55	2.86	1470.
190	4.29	34.05	189	27.02	106.6	3.66	3.07	1470.
200	4.21	34.08	199	27.06	103.2	3.76	3.28	1470.
210	4.12	34.09	208	27.07	101.6	3.87	3.49	1470.
220	4.03	34.10	218	27.09	100.0	3.97	3.71	1469.
230	3.93	34.12	228	27.12	97.6	4.07	3.94	1469.
240	3.88	34.13	238	27.13	96.5	4.16	4.17	1469.
250	3.85	34.15	248	27.15	94.7	4.26	4.41	1469.
260	3.84	34.17	258	27.17	93.2	4.35	4.66	1469.
270	3.84	34.18	268	27.17	92.5	4.44	4.91	1469.
280	3.87	34.21	278	27.19	90.6	4.54	5.16	1470.
290	3.90	34.21	288	27.19	91.1	4.63	5.43	1470.
300	3.89	34.22	298	27.20	90.6	4.72	5.70	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 52

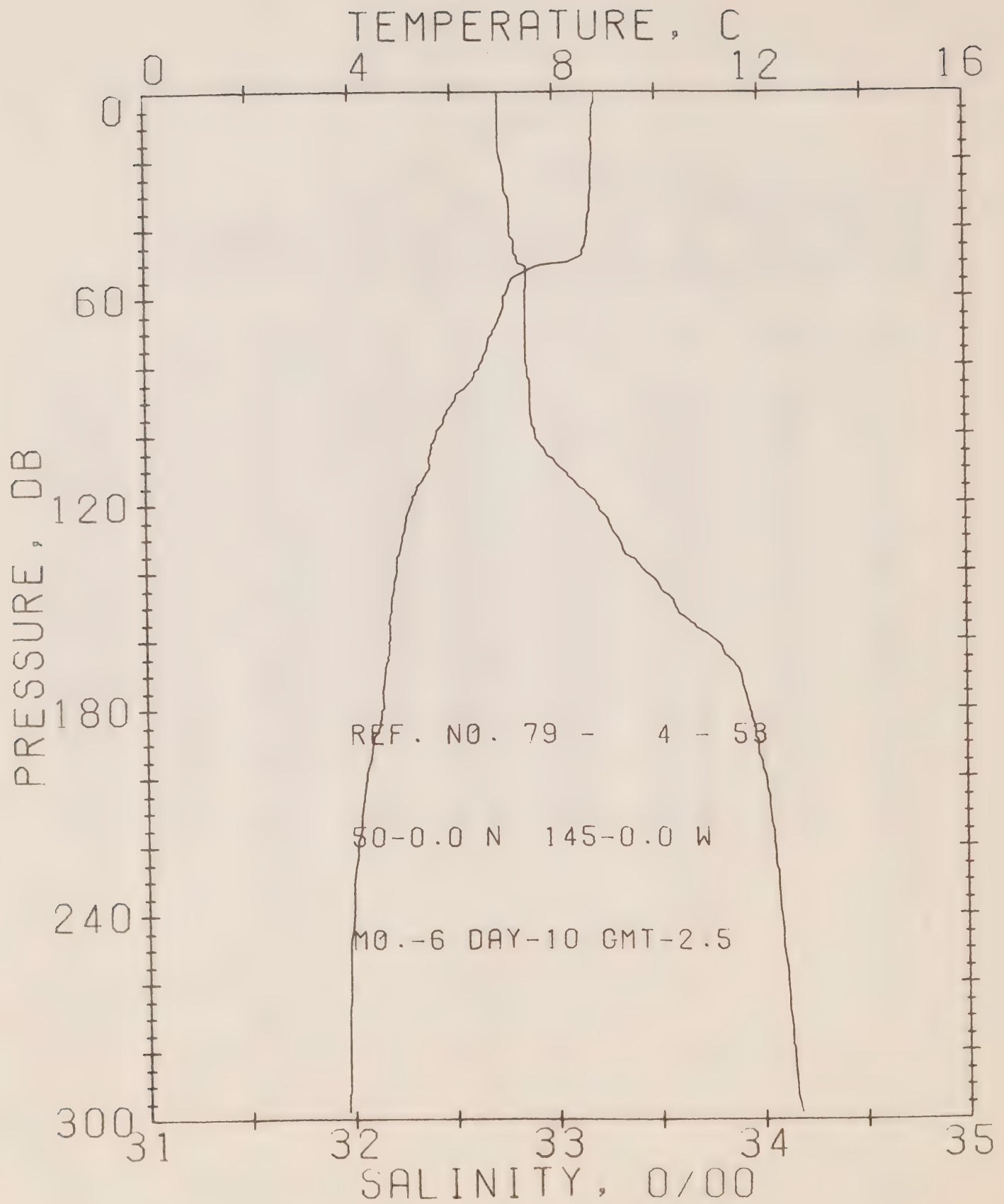
DATE 8/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 265 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

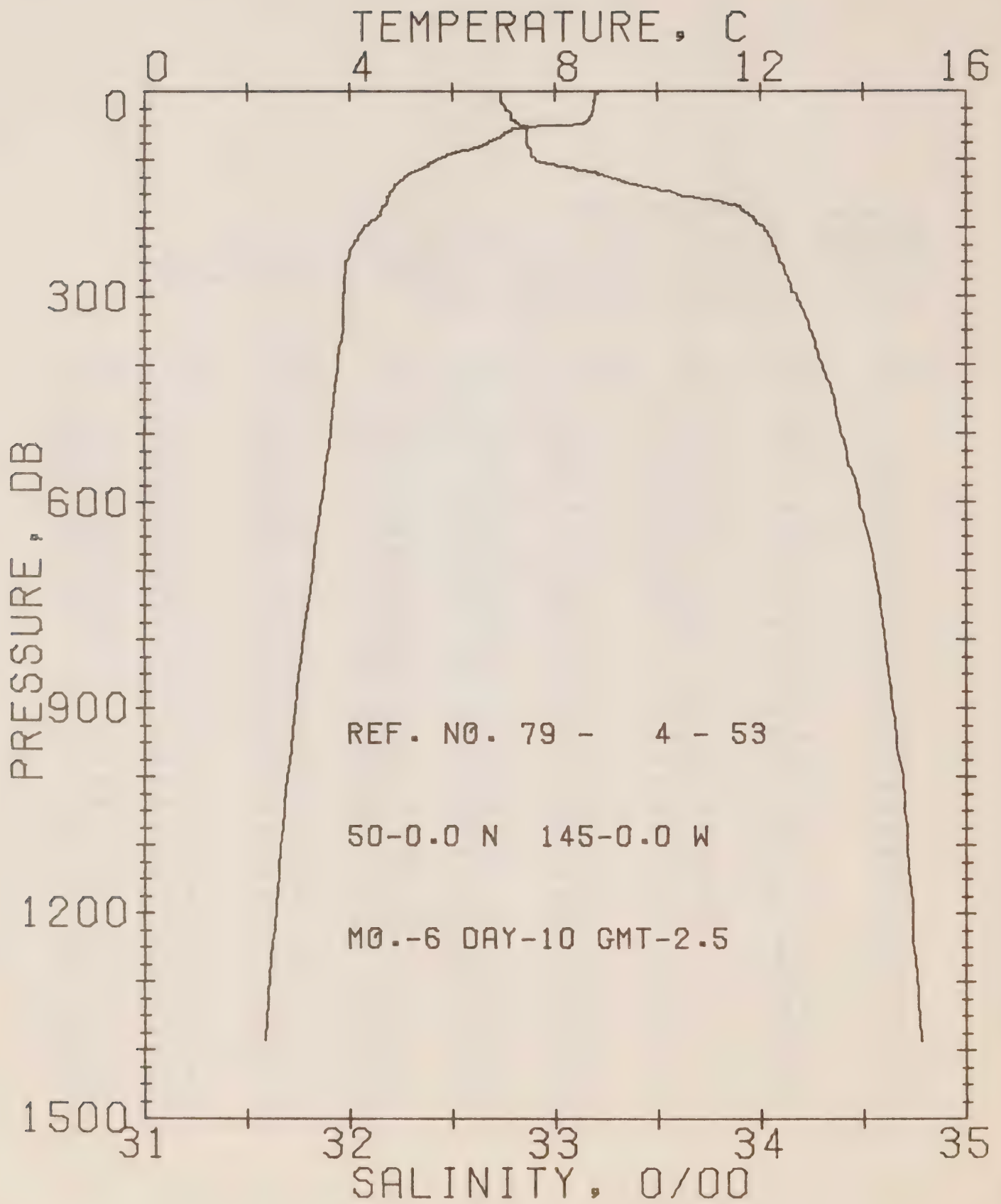
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.48	32.80	0	25.50	249.1	.00	.00	1482.
10	8.41	32.81	10	25.52	247.5	.25	.01	1482.
20	8.42	32.83	20	25.53	246.3	.50	.05	1482.
30	8.42	32.84	30	25.54	246.1	.74	.11	1482.
50	7.02	32.90	50	25.79	222.5	1.22	.31	1477.
75	6.61	32.92	75	25.86	216.1	1.77	.66	1476.
100	5.80	32.97	99	26.00	202.8	2.29	1.12	1473.
125	5.13	33.22	124	26.27	176.8	2.77	1.67	1471.
150	4.67	33.61	149	26.63	143.2	3.17	2.22	1470.
175	4.45	33.94	174	26.92	116.0	3.49	2.76	1470.
200	4.21	34.08	199	27.06	103.2	3.76	3.28	1470.
225	3.97	34.11	223	27.10	98.7	4.02	3.83	1469.
250	3.85	34.15	248	27.15	94.7	4.26	4.41	1469.
300	3.89	34.22	298	27.20	90.6	4.72	5.70	1470.
400	3.72	34.35	397	27.32	79.8	5.57	8.75	1471.
500	3.59	34.43	496	27.40	72.8	6.34	12.24	1473.
600	3.44	34.52	595	27.48	66.0	7.03	16.12	1474.
800	3.07	34.64	793	27.61	54.3	8.22	24.58	1476.
1000	2.75	34.73	990	27.71	45.6	9.21	33.65	1478.
1200	2.50	34.78	1187	27.78	40.1	10.07	43.23	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 53 DATE 10/ 6/79
 POSITION 50- .0N, 145- .0W GMT 2.5 STATION P
 RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.84	32.73	0	25.39	259.5	.00	.00	1483.
10	8.78	32.73	10	25.40	258.8	.26	.01	1483.
20	8.77	32.74	20	25.41	257.8	.52	.05	1483.
30	8.73	32.77	30	25.44	255.4	.77	.12	1483.
40	8.67	32.79	40	25.46	253.2	1.03	.21	1483.
50	8.28	32.83	50	25.55	244.8	1.28	.32	1482.
60	7.01	32.86	60	25.76	225.5	1.51	.45	1477.
70	6.81	32.86	70	25.78	223.0	1.73	.60	1477.
80	6.54	32.87	79	25.83	219.0	1.95	.77	1476.
90	6.04	32.88	89	25.90	212.3	2.17	.96	1474.
100	5.67	32.90	99	25.96	206.2	2.38	1.16	1473.
110	5.55	33.03	109	26.08	195.6	2.58	1.37	1472.
120	5.18	33.20	119	26.25	178.8	2.77	1.59	1471.
130	4.99	33.31	129	26.36	168.5	2.94	1.81	1471.
140	4.88	33.44	139	26.48	157.7	3.10	2.04	1471.
150	4.77	33.58	149	26.60	146.1	3.25	2.26	1471.
160	4.74	33.78	159	26.76	130.9	3.39	2.48	1471.
170	4.63	33.90	169	26.87	120.9	3.52	2.69	1471.
180	4.60	33.94	179	26.90	117.6	3.64	2.91	1471.
190	4.39	33.98	189	26.96	112.5	3.75	3.12	1470.
200	4.26	34.01	199	27.00	108.7	3.86	3.34	1470.
210	4.17	34.04	209	27.03	106.2	3.97	3.57	1470.
220	4.08	34.05	218	27.05	103.9	4.08	3.80	1470.
230	4.01	34.07	228	27.07	102.2	4.18	4.03	1469.
240	3.99	34.08	238	27.08	101.0	4.28	4.28	1469.
250	3.93	34.09	248	27.09	99.8	4.38	4.53	1469.
260	3.93	34.11	258	27.11	98.4	4.48	4.79	1470.
270	3.90	34.12	268	27.12	97.3	4.58	5.05	1470.
280	3.90	34.14	278	27.14	96.2	4.68	5.32	1470.
290	3.90	34.15	288	27.14	95.7	4.77	5.60	1470.
300	3.87	34.17	298	27.17	93.5	4.87	5.88	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 53

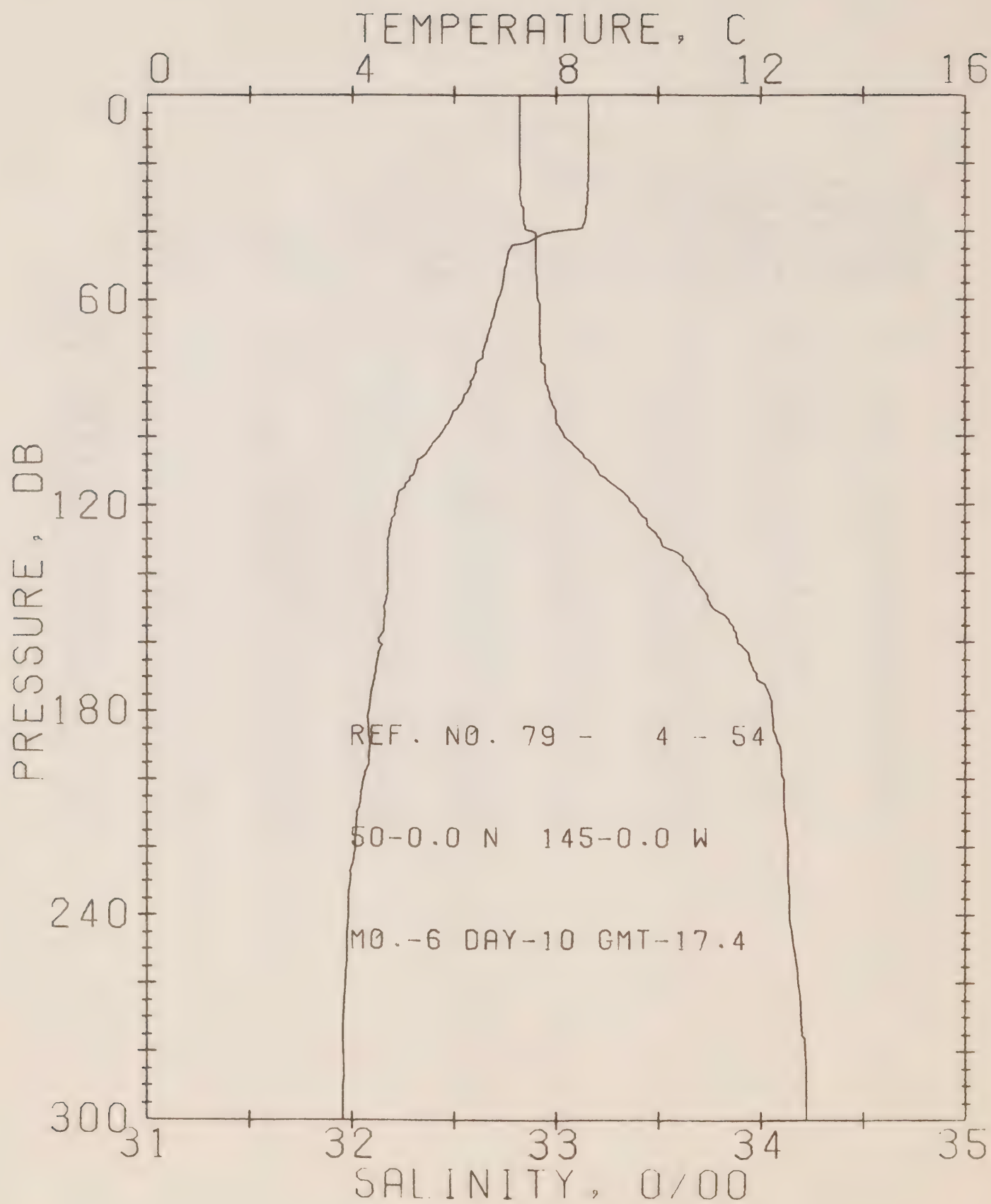
DATE 10/ 6/79

POSITION 50- .0N, 145- .0W GMT 2.5 STATION P

RESULTS OF STP CAST 275 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.84	32.73	0	25.39	259.5	.00	.00	1483.
10	8.78	32.73	10	25.40	258.8	.26	.01	1483.
20	8.77	32.74	20	25.41	257.8	.52	.05	1483.
30	8.73	32.77	30	25.44	255.4	.77	.12	1483.
50	8.28	32.83	50	25.55	244.8	1.28	.32	1482.
75	6.69	32.86	75	25.80	221.5	1.84	.68	1476.
100	5.67	32.90	99	25.96	206.2	2.38	1.16	1473.
125	5.07	33.26	124	26.31	173.1	2.85	1.70	1471.
150	4.77	33.58	149	26.60	146.1	3.25	2.26	1471.
175	4.59	33.92	174	26.89	119.0	3.58	2.80	1471.
200	4.26	34.01	199	27.00	108.7	3.86	3.34	1470.
225	4.05	34.06	223	27.06	103.3	4.13	3.92	1469.
250	3.93	34.09	248	27.09	99.8	4.38	4.53	1469.
300	3.87	34.17	298	27.17	93.5	4.87	5.88	1470.
400	3.75	34.30	397	27.28	83.8	5.75	9.04	1471.
500	3.62	34.39	496	27.37	76.1	6.55	12.68	1473.
600	3.44	34.48	595	27.45	68.6	7.27	16.72	1474.
800	3.07	34.60	793	27.58	57.0	8.51	25.54	1475.
1000	2.78	34.69	990	27.68	48.7	9.58	35.30	1478.
1200	2.55	34.74	1188	27.74	43.7	10.50	45.67	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 54

DATE 10/ 6/79

POSITION 50- .0N, 145- .0W

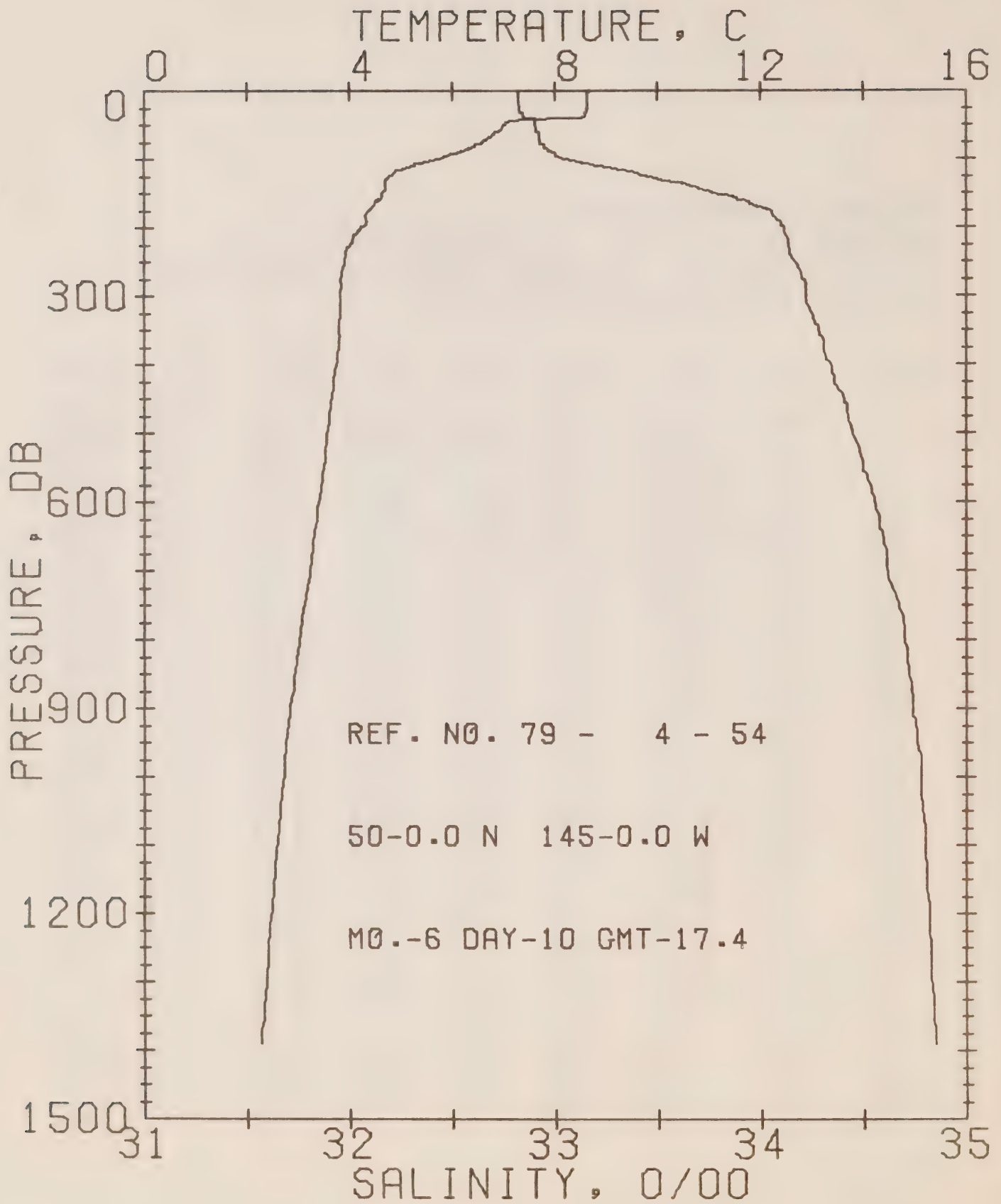
GMT 17.4

STATION P

RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.68	32.82	0	25.49	250.5	.00	.00	1483.
10	8.63	32.82	10	25.49	249.9	.25	.01	1483.
20	8.64	32.82	20	25.49	250.2	.50	.05	1483.
30	8.62	32.82	30	25.50	249.7	.75	.11	1483.
40	7.92	32.90	40	25.66	234.4	1.00	.20	1481.
50	7.02	32.90	50	25.79	222.5	1.22	.31	1477.
60	6.87	32.91	60	25.82	219.5	1.44	.43	1477.
70	6.66	32.92	70	25.85	216.7	1.66	.57	1476.
80	6.43	32.95	79	25.90	211.6	1.88	.74	1475.
90	6.16	32.98	89	25.96	206.3	2.09	.92	1475.
100	5.70	33.04	99	26.07	196.4	2.29	1.12	1473.
110	5.23	33.20	109	26.25	179.2	2.47	1.32	1471.
120	4.86	33.39	119	26.44	161.0	2.64	1.51	1470.
130	4.70	33.51	129	26.55	150.4	2.80	1.71	1470.
140	4.70	33.67	139	26.68	138.5	2.94	1.91	1470.
150	4.61	33.77	149	26.77	130.2	3.08	2.11	1470.
160	4.51	33.89	159	26.87	120.2	3.20	2.30	1470.
170	4.44	33.98	169	26.95	112.8	3.32	2.50	1470.
180	4.32	34.05	179	27.02	106.4	3.43	2.69	1470.
190	4.34	34.09	189	27.05	103.7	3.53	2.89	1470.
200	4.22	34.11	199	27.08	101.1	3.63	3.10	1470.
210	4.09	34.12	208	27.10	99.1	3.74	3.31	1469.
220	4.04	34.13	218	27.11	97.9	3.83	3.52	1469.
230	3.96	34.13	228	27.12	97.0	3.93	3.74	1469.
240	3.91	34.14	238	27.13	96.0	4.03	3.98	1469.
250	3.89	34.16	248	27.15	94.4	4.12	4.21	1469.
260	3.86	34.18	258	27.17	92.5	4.22	4.46	1469.
270	3.84	34.19	268	27.19	91.4	4.31	4.70	1469.
280	3.82	34.21	278	27.20	89.9	4.40	4.96	1470.
290	3.82	34.22	288	27.21	89.5	4.49	5.22	1470.
300	3.82	34.22	298	27.21	89.6	4.58	5.49	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 54

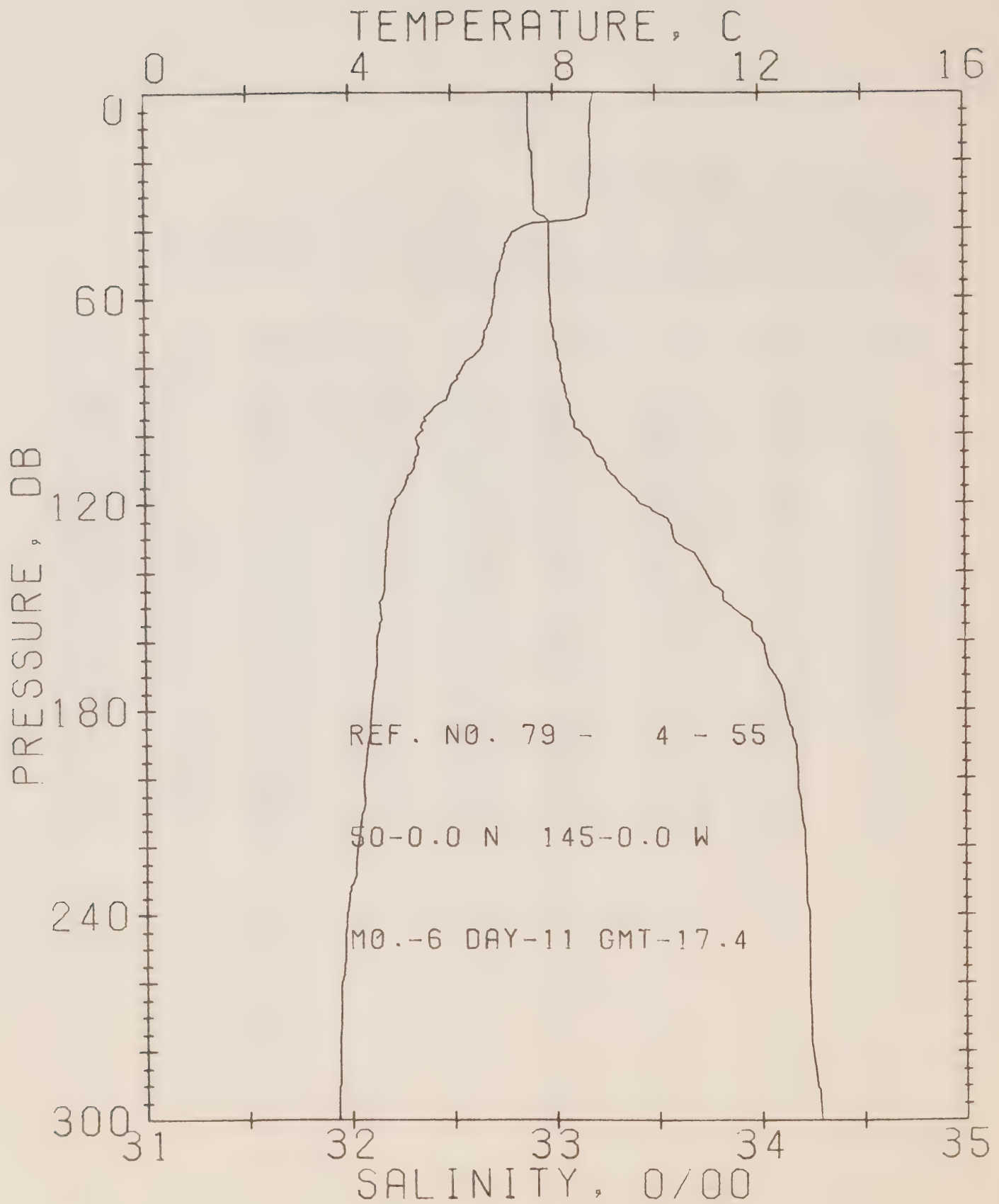
DATE 10/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 312 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.68	32.82	0	25.49	250.5	.00	.00	1483.
10	8.63	32.82	10	25.49	249.9	.25	.01	1483.
20	8.64	32.82	20	25.49	250.2	.50	.05	1483.
30	8.62	32.82	30	25.50	249.7	.75	.11	1483.
50	7.02	32.90	50	25.79	222.5	1.22	.31	1477.
75	6.56	32.93	75	25.87	214.7	1.77	.65	1476.
100	5.70	33.04	99	26.07	196.4	2.29	1.12	1473.
125	4.75	33.45	124	26.50	155.5	2.72	1.61	1470.
150	4.61	33.77	149	26.77	130.2	3.08	2.11	1470.
175	4.36	34.04	174	27.01	107.8	3.37	2.60	1470.
200	4.22	34.11	199	27.08	101.1	3.63	3.10	1470.
225	3.99	34.13	223	27.12	97.4	3.88	3.63	1469.
250	3.89	34.16	248	27.15	94.4	4.12	4.21	1469.
300	3.82	34.22	298	27.21	89.6	4.58	5.49	1470.
400	3.73	34.34	397	27.31	80.7	5.43	8.53	1471.
500	3.56	34.45	496	27.42	71.3	6.19	12.00	1472.
600	3.39	34.55	595	27.51	62.8	6.86	15.74	1473.
800	3.02	34.70	792	27.67	49.3	7.98	23.68	1475.
1000	2.70	34.78	990	27.76	41.2	8.88	31.88	1477.
1200	2.46	34.82	1187	27.81	36.8	9.66	40.62	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 55

DATE 11/ 6/79

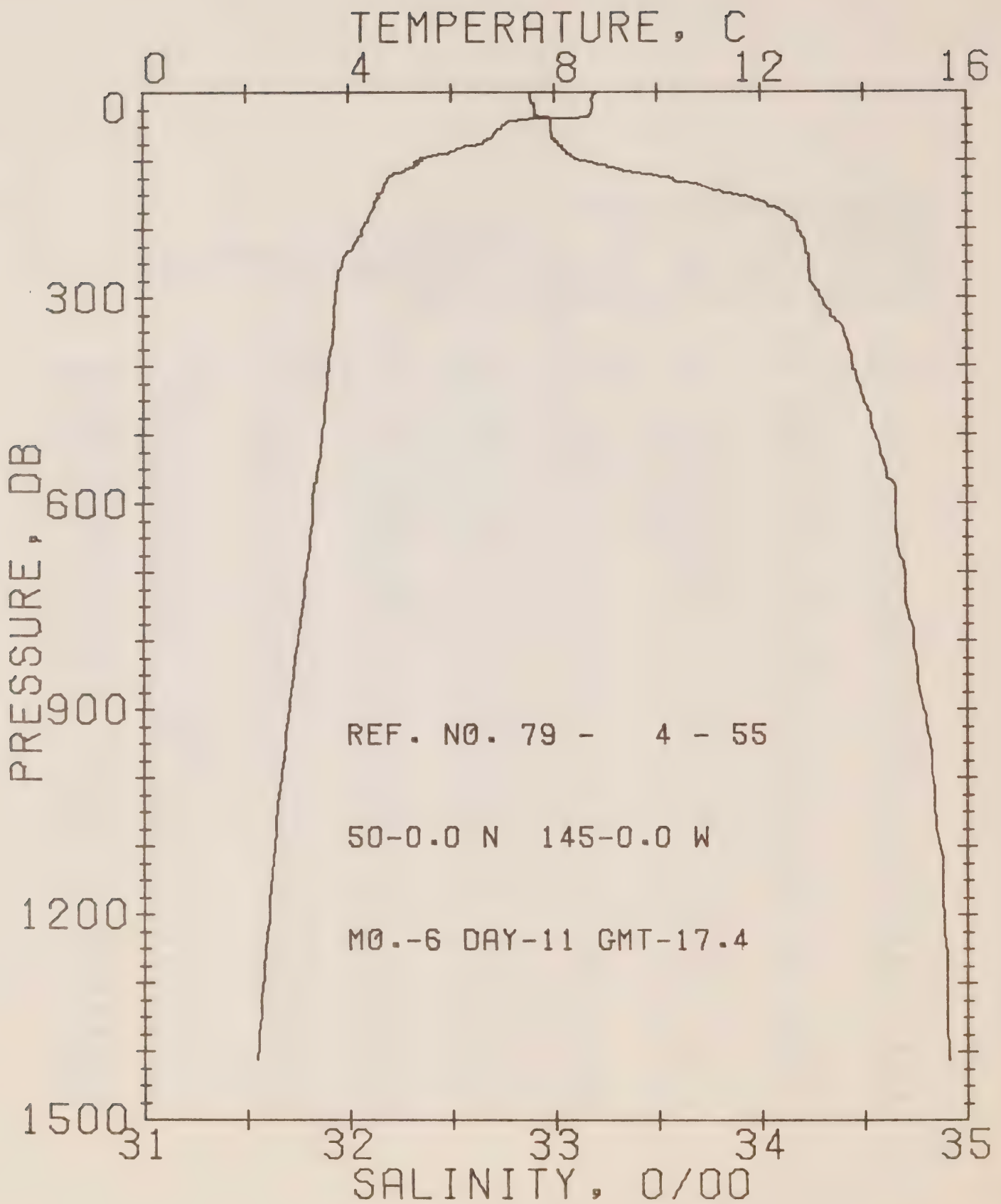
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.81	32.88	0	25.51	247.9	.00	.00	1483.
10	8.73	32.88	10	25.52	246.9	.25	.01	1483.
20	8.74	32.90	20	25.54	245.8	.49	.05	1483.
30	8.71	32.91	30	25.55	244.7	.74	.11	1483.
40	7.31	32.98	40	25.81	220.2	.98	.20	1478.
50	6.97	32.98	50	25.86	215.9	1.19	.30	1477.
60	6.86	32.99	60	25.88	213.9	1.41	.42	1477.
70	6.65	33.00	70	25.91	210.6	1.62	.56	1476.
80	6.23	33.03	79	25.99	203.3	1.83	.72	1475.
90	5.89	33.07	89	26.07	196.3	2.03	.89	1474.
100	5.34	33.14	99	26.19	184.8	2.22	1.07	1472.
110	5.25	33.26	109	26.29	175.0	2.40	1.27	1472.
120	4.88	33.42	119	26.46	159.0	2.56	1.46	1470.
130	4.74	33.59	129	26.61	145.2	2.71	1.65	1470.
140	4.68	33.74	139	26.74	133.1	2.85	1.84	1470.
150	4.59	33.87	149	26.85	122.5	2.98	2.03	1470.
160	4.51	34.01	159	26.97	111.3	3.10	2.21	1470.
170	4.49	34.07	169	27.02	106.6	3.21	2.40	1470.
180	4.40	34.12	179	27.07	101.7	3.31	2.58	1470.
190	4.33	34.17	189	27.11	97.6	3.41	2.77	1470.
200	4.25	34.18	199	27.13	96.1	3.51	2.96	1470.
210	4.22	34.20	208	27.15	94.7	3.60	3.16	1470.
220	4.12	34.21	218	27.17	92.7	3.70	3.37	1470.
230	4.06	34.22	228	27.18	91.4	3.79	3.58	1470.
240	3.90	34.23	238	27.21	89.1	3.88	3.80	1469.
250	3.88	34.23	248	27.21	89.0	3.97	4.02	1469.
260	3.79	34.23	258	27.22	88.2	4.06	4.25	1469.
270	3.78	34.24	268	27.23	87.4	4.14	4.49	1469.
280	3.76	34.25	278	27.24	86.7	4.23	4.73	1469.
290	3.75	34.27	288	27.25	85.0	4.32	4.98	1470.
300	3.73	34.29	298	27.27	83.4	4.40	5.23	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 55

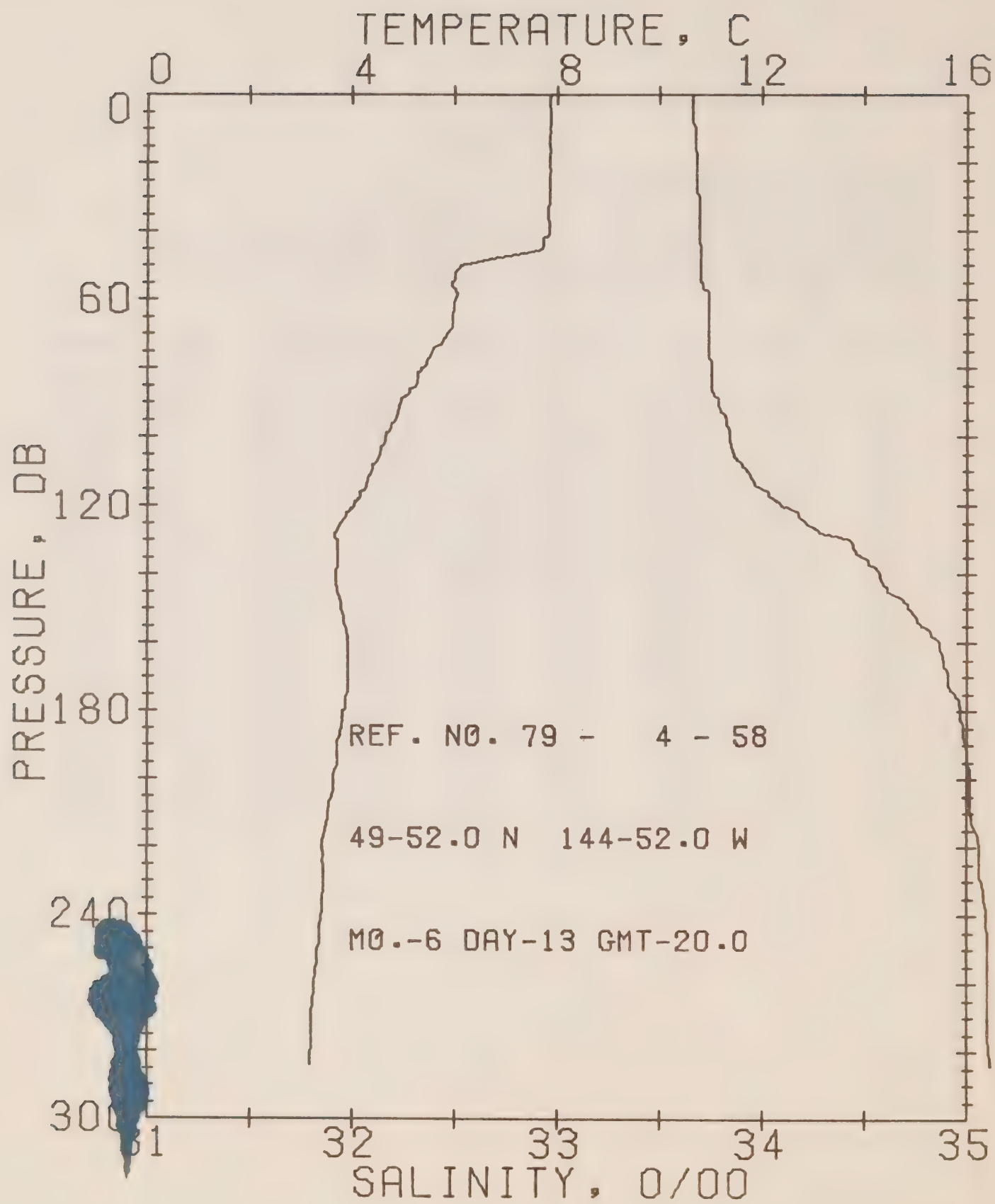
DATE 11/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 321 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.81	32.88	0	25.51	247.9	.00	.00	1483.
10	8.73	32.88	10	25.52	246.9	.25	.01	1483.
20	8.74	32.90	20	25.54	245.8	.49	.05	1483.
30	8.71	32.91	30	25.55	244.7	.74	.11	1483.
50	6.97	32.98	50	25.86	215.9	1.19	.30	1477.
75	6.55	33.02	75	25.94	207.9	1.73	.64	1476.
100	5.34	33.14	99	26.19	184.8	2.22	1.07	1472.
125	4.76	33.56	124	26.58	147.3	2.64	1.56	1470.
150	4.59	33.87	149	26.85	122.5	2.98	2.03	1470.
175	4.43	34.11	174	27.06	103.1	3.26	2.49	1470.
200	4.25	34.18	199	27.13	96.1	3.51	2.96	1470.
225	4.08	34.22	223	27.18	91.6	3.74	3.47	1470.
250	3.88	34.23	248	27.21	89.0	3.97	4.02	1469.
300	3.73	34.29	298	27.27	83.4	4.40	5.23	1470.
400	3.60	34.45	397	27.41	71.2	5.16	7.94	1471.
500	3.47	34.55	496	27.50	62.9	5.83	11.00	1472.
600	3.28	34.65	595	27.60	54.3	6.41	14.25	1473.
800	2.98	34.74	792	27.70	45.9	7.43	21.47	1475.
1000	2.66	34.83	990	27.80	36.8	8.25	29.00	1477.
1200	2.43	34.89	1187	27.87	31.5	8.93	36.56	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 55

DATE 11/ 6/79

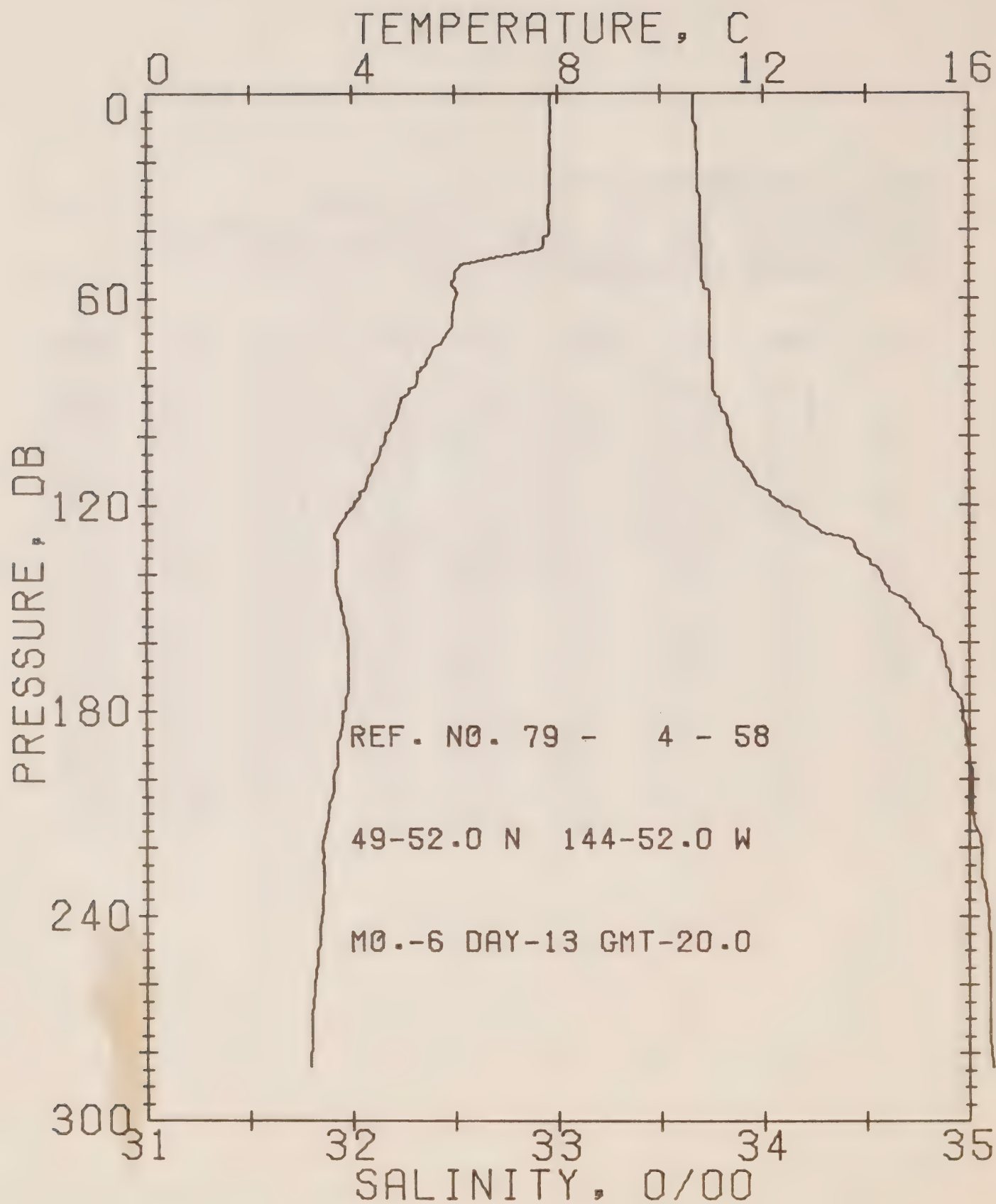
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 321 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.81	32.88	0	25.51	247.9	.00	.00	1483.
10	8.73	32.88	10	25.52	246.9	.25	.01	1483.
20	8.74	32.90	20	25.54	245.8	.49	.05	1483.
30	8.71	32.91	30	25.55	244.7	.74	.11	1483.
50	6.97	32.98	50	25.86	215.9	1.19	.30	1477.
75	6.55	33.02	75	25.94	207.9	1.73	.64	1476.
100	5.34	33.14	99	26.19	184.8	2.22	1.07	1472.
125	4.76	33.56	124	26.58	147.3	2.64	1.56	1470.
150	4.59	33.87	149	26.85	122.5	2.98	2.03	1470.
175	4.43	34.11	174	27.06	103.1	3.26	2.49	1470.
200	4.25	34.18	199	27.13	96.1	3.51	2.96	1470.
225	4.08	34.22	223	27.18	91.6	3.74	3.47	1470.
250	3.88	34.23	248	27.21	89.0	3.97	4.02	1469.
300	3.73	34.29	298	27.27	83.4	4.40	5.23	1470.
400	3.60	34.45	397	27.41	71.2	5.16	7.94	1471.
500	3.47	34.55	496	27.50	62.9	5.83	11.00	1472.
600	3.28	34.65	595	27.60	54.3	6.41	14.25	1473.
800	2.98	34.74	792	27.70	45.9	7.43	21.47	1475.
1000	2.66	34.83	990	27.80	36.8	8.25	29.00	1477.
1200	2.43	34.89	1187	27.87	31.5	8.93	36.56	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 58

DATE 13/ 6/79

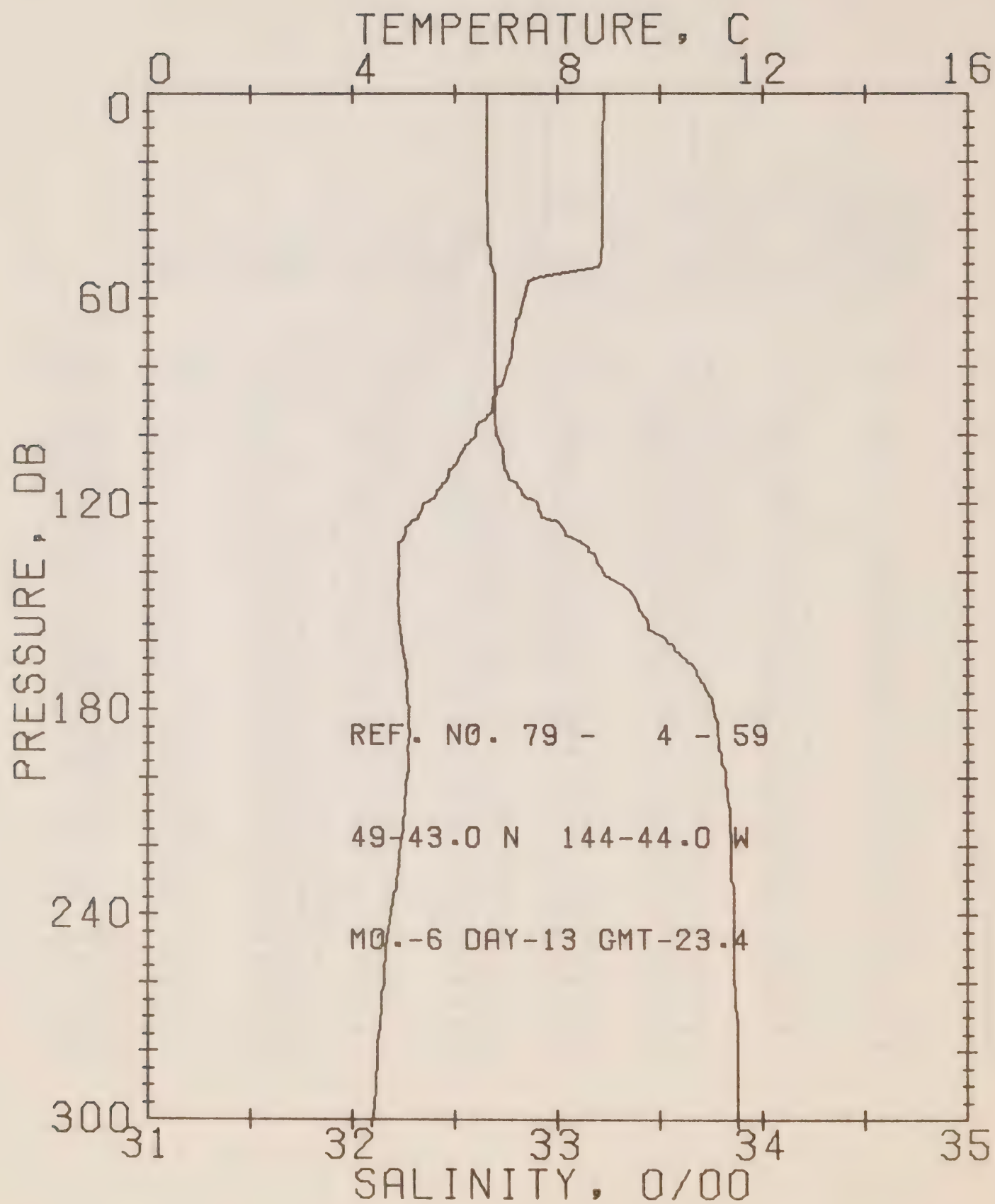
POSITION 49-52.0N, 144-52.0W GMT 20.0

STATION E3

RESULTS OF STP CAST 210 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.87	33.66	0	26.26	176.6	.00	.00	1481.
10	7.85	33.67	10	26.27	175.7	.18	.01	1481.
20	7.85	33.68	20	26.28	175.1	.35	.04	1481.
30	7.84	33.69	30	26.29	174.4	.53	.08	1481.
40	7.84	33.69	40	26.29	174.6	.70	.14	1481.
50	6.12	33.70	50	26.53	151.5	.87	.22	1475.
60	6.01	33.74	60	26.58	147.3	1.02	.30	1474.
70	5.83	33.74	70	26.60	145.3	1.17	.40	1474.
80	5.35	33.75	79	26.67	139.1	1.31	.51	1472.
90	4.94	33.79	89	26.75	131.7	1.44	.63	1471.
100	4.65	33.84	99	26.82	124.9	1.57	.75	1470.
110	4.36	33.93	109	26.92	115.2	1.69	.88	1469.
120	4.03	34.09	119	27.08	99.9	1.80	1.01	1468.
130	3.72	34.43	129	27.38	71.4	1.89	1.12	1467.
140	3.67	34.57	139	27.50	60.5	1.96	1.21	1467.
150	3.79	34.71	149	27.60	51.3	2.01	1.29	1468.
160	3.92	34.87	159	27.71	40.7	2.06	1.37	1469.
170	3.91	34.91	169	27.75	37.7	2.10	1.43	1469.
180	3.81	34.97	179	27.80	32.3	2.13	1.50	1469.
190	3.72	34.99	189	27.83	29.7	2.16	1.56	1469.
200	3.64	35.01	198	27.85	27.7	2.19	1.61	1469.
210	3.52	35.01	208	27.87	26.4	2.22	1.67	1468.
220	3.41	35.06	218	27.92	21.9	2.24	1.72	1468.
230	3.45	35.07	228	27.92	22.0	2.27	1.77	1468.
240	3.39	35.09	238	27.94	19.6	2.29	1.82	1468.
250	3.32	35.10	248	27.96	18.3	2.31	1.87	1468.
260	3.26	35.10	258	27.96	17.8	2.32	1.92	1468.
270	3.21	35.10	268	27.97	17.4	2.34	1.96	1468.
280	3.17	35.11	278	27.97	16.7	2.36	2.01	1468.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 59

DATE 13/ 6/79

POSITION 49-43.0N, 144-44.0W

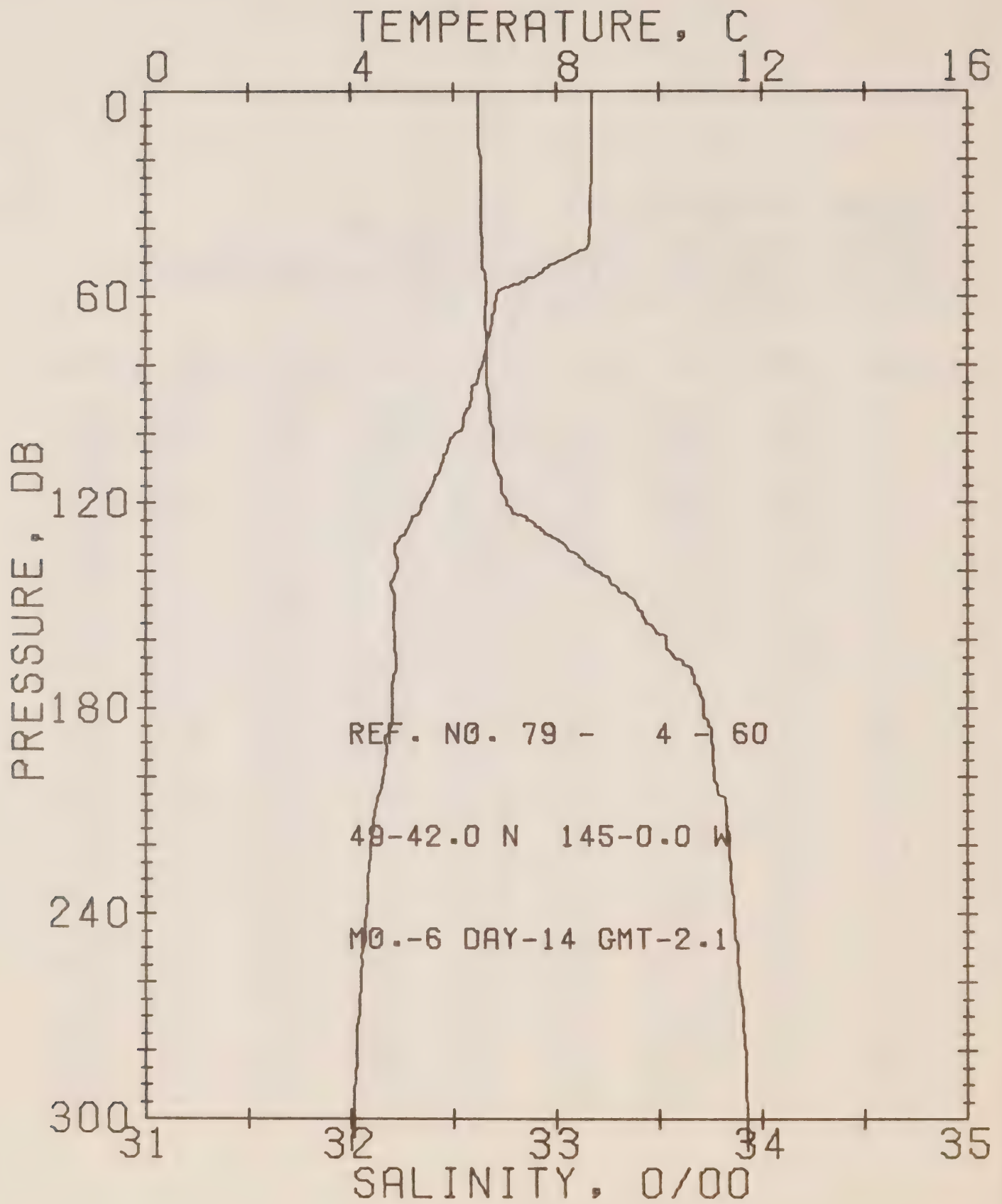
GMT 23.4

STATION E4

RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.90	32.65	0	25.32	266.3	.00	.00	1483.
10	8.89	32.65	10	25.32	266.4	.27	.01	1483.
20	8.88	32.65	20	25.32	266.4	.53	.05	1484.
30	8.88	32.65	30	25.32	266.5	.80	.12	1484.
40	8.88	32.66	40	25.33	266.0	1.07	.22	1484.
50	8.83	32.67	50	25.35	264.7	1.33	.34	1484.
60	7.33	32.69	60	25.58	242.3	1.58	.48	1478.
70	7.14	32.69	70	25.61	240.0	1.82	.64	1478.
80	7.01	32.69	80	25.62	238.4	2.06	.82	1477.
90	6.75	32.69	89	25.66	235.2	2.30	1.03	1476.
100	6.39	32.70	99	25.71	230.1	2.53	1.25	1475.
110	5.90	32.74	109	25.81	221.3	2.75	1.49	1473.
120	5.39	32.90	119	25.99	203.6	2.97	1.74	1472.
130	4.98	33.07	129	26.17	186.4	3.16	1.99	1470.
140	4.91	33.22	139	26.30	174.5	3.34	2.24	1471.
150	4.89	33.39	149	26.44	161.3	3.51	2.48	1471.
160	4.96	33.53	159	26.54	152.0	3.67	2.73	1471.
170	5.06	33.68	169	26.65	142.0	3.81	2.98	1472.
180	5.10	33.76	179	26.70	136.6	3.95	3.23	1473.
190	5.09	33.79	189	26.73	134.4	4.09	3.48	1473.
200	5.06	33.82	199	26.76	131.9	4.22	3.75	1473.
210	5.00	33.84	209	26.78	129.8	4.35	4.02	1473.
220	4.94	33.85	218	26.79	128.5	4.48	4.30	1473.
230	4.86	33.85	228	26.80	127.7	4.61	4.60	1473.
240	4.74	33.86	238	26.82	125.7	4.74	4.90	1472.
250	4.64	33.86	248	26.83	124.8	4.86	5.21	1472.
260	4.61	33.86	258	26.84	124.5	4.99	5.54	1472.
270	4.55	33.88	268	26.86	122.7	5.11	5.87	1472.
280	4.48	33.88	278	26.87	121.8	5.23	6.21	1472.
290	4.45	33.88	288	26.87	121.6	5.35	6.57	1472.
300	4.39	33.88	298	26.88	121.0	5.47	6.93	1472.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 60

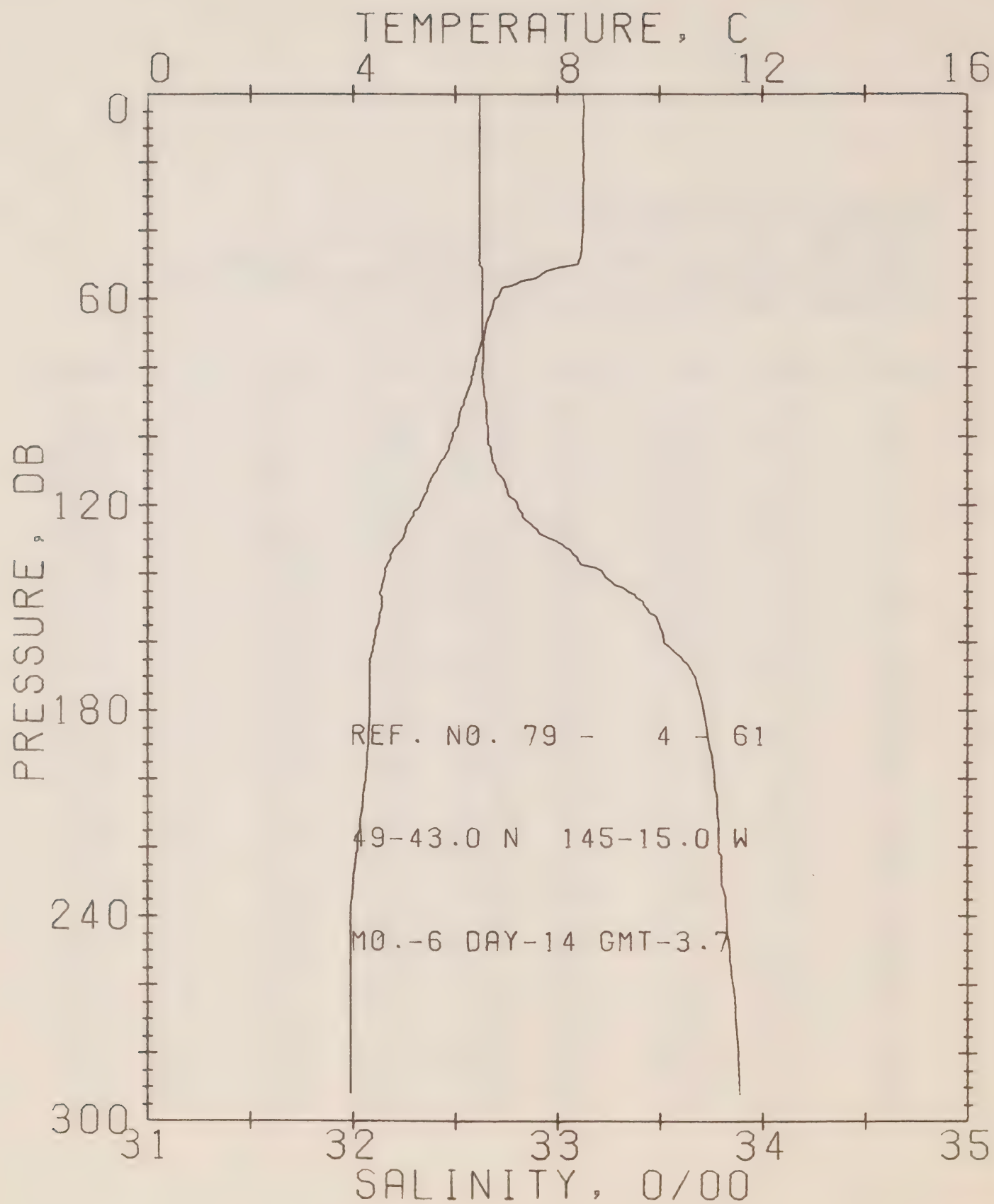
DATE 14/ 6/79

POSITION 49-42.0N, 145- .0W GMT 2.1 STATION C1

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.69	32.62	0	25.33	265.5	.00	.00	1482.
10	8.69	32.62	10	25.33	265.6	.27	.01	1483.
20	8.69	32.63	20	25.34	265.1	.53	.05	1483.
30	8.68	32.63	30	25.34	265.1	.80	.12	1483.
40	8.65	32.63	40	25.34	264.9	1.06	.22	1483.
50	7.99	32.64	50	25.45	254.8	1.32	.34	1481.
60	6.82	32.66	60	25.63	238.0	1.57	.47	1476.
70	6.70	32.65	70	25.64	237.0	1.81	.63	1476.
80	6.56	32.66	80	25.66	234.9	2.04	.81	1476.
90	6.34	32.67	89	25.70	231.6	2.28	1.01	1475.
100	6.03	32.69	99	25.75	226.5	2.51	1.24	1474.
110	5.73	32.70	109	25.80	221.9	2.73	1.48	1473.
120	5.40	32.76	119	25.88	214.2	2.95	1.73	1472.
130	4.97	32.98	129	26.10	193.0	3.15	1.99	1470.
140	4.87	33.19	139	26.28	176.4	3.34	2.25	1470.
150	4.85	33.39	149	26.44	161.2	3.50	2.49	1471.
160	4.86	33.53	159	26.55	150.9	3.66	2.74	1471.
170	4.84	33.66	169	26.65	141.1	3.81	2.99	1471.
180	4.80	33.71	179	26.70	137.0	3.95	3.23	1471.
190	4.69	33.75	189	26.75	132.6	4.08	3.49	1471.
200	4.62	33.77	199	26.77	130.8	4.21	3.75	1471.
210	4.46	33.83	209	26.83	124.7	4.34	4.02	1471.
220	4.38	33.84	218	26.85	123.1	4.46	4.29	1470.
230	4.33	33.85	228	26.86	122.0	4.59	4.57	1470.
240	4.29	33.86	238	26.88	120.7	4.71	4.86	1470.
250	4.23	33.88	248	26.90	118.8	4.83	5.16	1470.
260	4.19	33.89	258	26.91	117.7	4.95	5.47	1470.
270	4.14	33.91	268	26.93	115.8	5.06	5.78	1470.
280	4.10	33.92	278	26.94	114.9	5.18	6.11	1470.
290	4.07	33.92	288	26.94	114.5	5.29	6.44	1470.
300	4.05	33.93	298	26.95	113.6	5.41	6.78	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 61

DATE 14/ 6/79

POSITION 49-43.0N, 145-15.0W

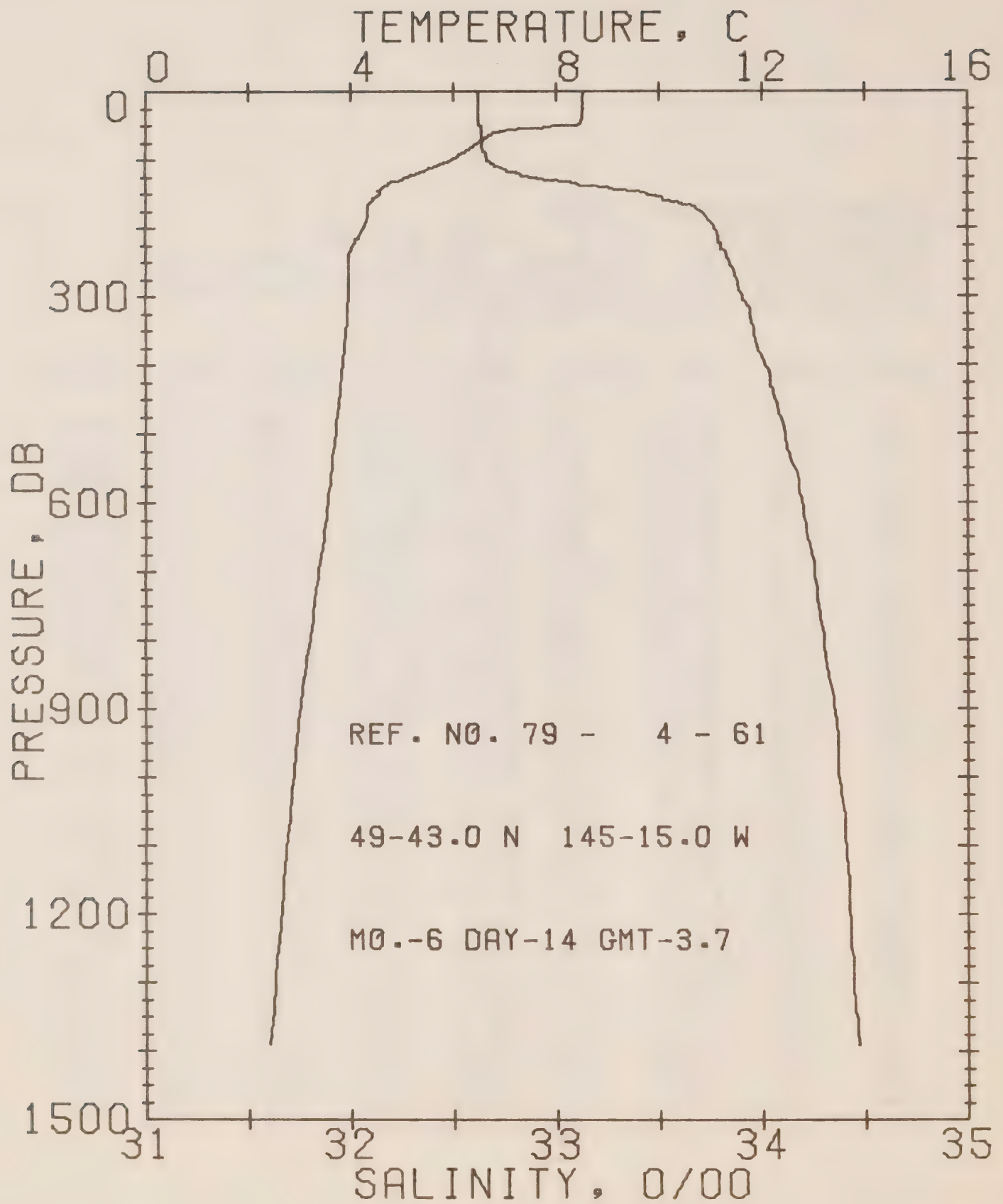
GMT 3.7

STATION W4

RESULTS OF STP CAST 159 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.52	32.62	0	25.35	263.0	.00	.00	1482.
10	8.52	32.62	10	25.35	263.2	.26	.01	1482.
20	8.52	32.62	20	25.35	263.4	.53	.05	1482.
30	8.52	32.62	30	25.35	263.5	.79	.12	1482.
40	8.50	32.62	40	25.36	263.3	1.05	.21	1482.
50	8.41	32.62	50	25.37	262.3	1.32	.34	1482.
60	6.78	32.63	60	25.61	239.7	1.56	.47	1476.
70	6.59	32.63	70	25.63	237.4	1.80	.63	1475.
80	6.38	32.63	80	25.66	235.0	2.04	.81	1475.
90	6.17	32.65	89	25.70	231.0	2.27	1.01	1474.
100	5.95	32.66	99	25.74	227.8	2.50	1.24	1473.
110	5.63	32.70	109	25.81	221.2	2.73	1.48	1472.
120	5.31	32.80	119	25.93	209.7	2.94	1.73	1471.
130	4.95	32.98	129	26.11	192.8	3.14	1.99	1470.
140	4.61	33.22	139	26.33	171.3	3.33	2.24	1469.
150	4.56	33.44	149	26.51	154.4	3.49	2.48	1470.
160	4.41	33.52	159	26.59	146.9	3.64	2.71	1469.
170	4.31	33.67	169	26.72	134.7	3.78	2.95	1469.
180	4.31	33.71	179	26.75	131.8	3.91	3.18	1469.
190	4.29	33.74	189	26.78	129.4	4.04	3.43	1469.
200	4.24	33.77	199	26.81	126.7	4.17	3.69	1469.
210	4.15	33.78	209	26.82	125.1	4.29	3.95	1469.
220	4.07	33.79	218	26.84	123.7	4.42	4.22	1469.
230	4.00	33.80	228	26.86	122.3	4.54	4.50	1469.
240	3.95	33.83	238	26.88	119.8	4.66	4.79	1469.
250	3.95	33.84	248	26.89	118.9	4.78	5.09	1469.
260	3.95	33.86	258	26.90	117.8	4.90	5.40	1469.
270	3.95	33.87	268	26.92	116.9	5.02	5.71	1470.
280	3.94	33.88	278	26.93	116.1	5.13	6.04	1470.
290	3.94	33.89	288	26.93	115.6	5.25	6.38	1470.
300	3.94	33.91	298	26.95	114.2	5.36	6.72	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 61

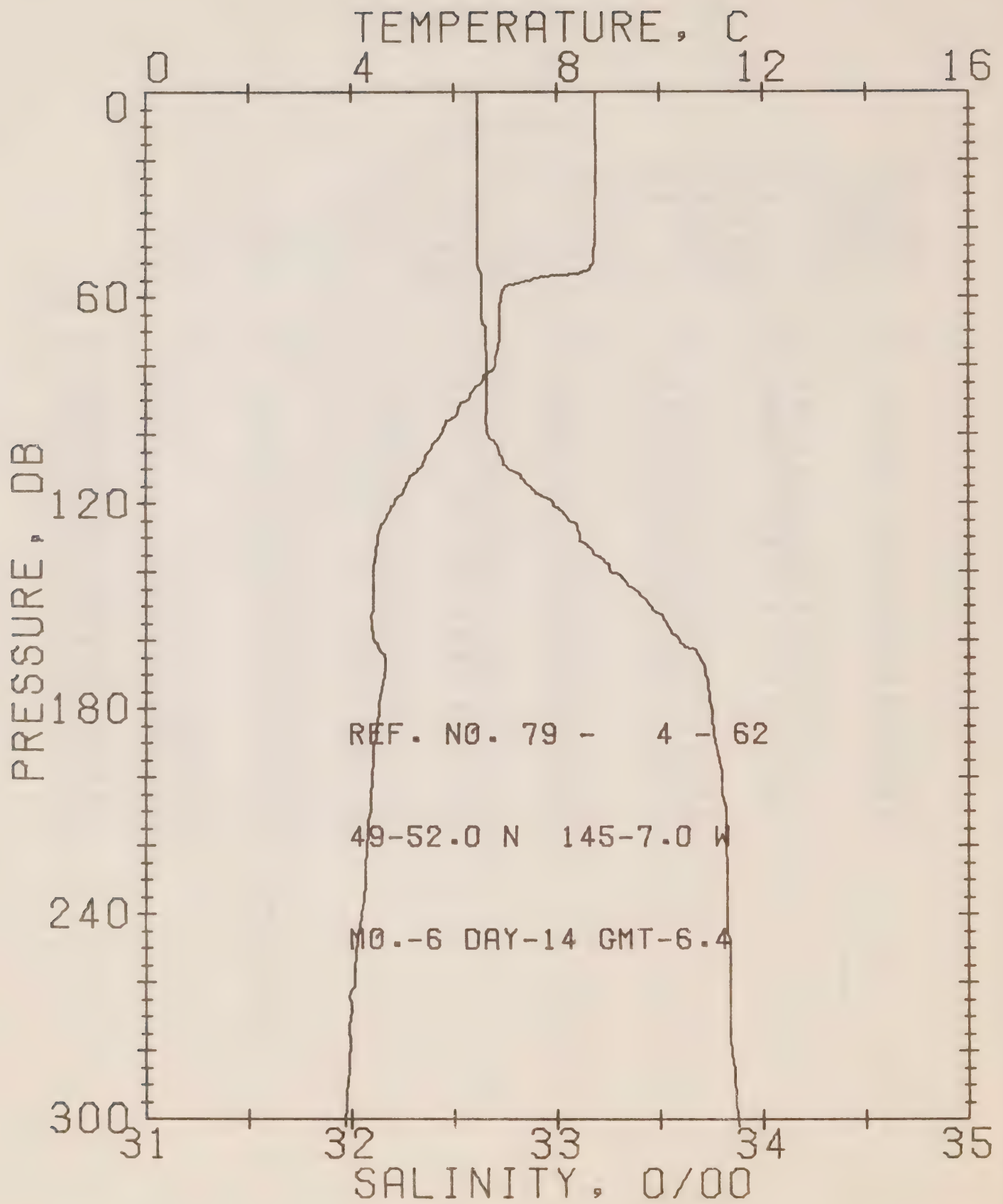
DATE 14/ 6/79

POSITION 49-43.0N, 145-15.0W GMT 3.7 STATION W4

RESULTS OF STP CAST 269 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.52	32.62	0	25.35	263.0	.00	.00	1482.
10	8.52	32.62	10	25.35	263.2	.26	.01	1482.
20	8.52	32.62	20	25.35	263.4	.53	.05	1482.
30	8.52	32.62	30	25.35	263.5	.79	.12	1482.
50	8.41	32.62	50	25.37	262.3	1.32	.34	1482.
75	6.47	32.64	75	25.66	235.2	1.92	.72	1475.
100	5.95	32.66	99	25.74	227.8	2.50	1.24	1473.
125	5.06	32.87	124	26.01	202.2	3.04	1.86	1470.
150	4.56	33.44	149	26.51	154.4	3.49	2.48	1470.
175	4.31	33.69	174	26.74	132.9	3.84	3.06	1469.
200	4.24	33.77	199	26.81	126.7	4.17	3.69	1469.
225	4.04	33.80	223	26.85	122.6	4.48	4.36	1469.
250	3.95	33.84	248	26.89	118.9	4.78	5.09	1469.
300	3.94	33.91	298	26.95	114.2	5.36	6.72	1470.
400	3.83	34.01	397	27.04	106.0	6.47	10.65	1471.
500	3.70	34.11	496	27.13	98.2	7.49	15.32	1473.
600	3.54	34.19	595	27.21	91.0	8.43	20.61	1474.
800	3.18	34.30	793	27.33	80.6	10.15	32.81	1476.
1000	2.86	34.37	990	27.42	73.2	11.67	46.75	1478.
1200	2.63	34.42	1188	27.48	67.9	13.07	62.43	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 62

DATE 14/ 6/79

POSITION 49-52.0N, 145- 7.0W

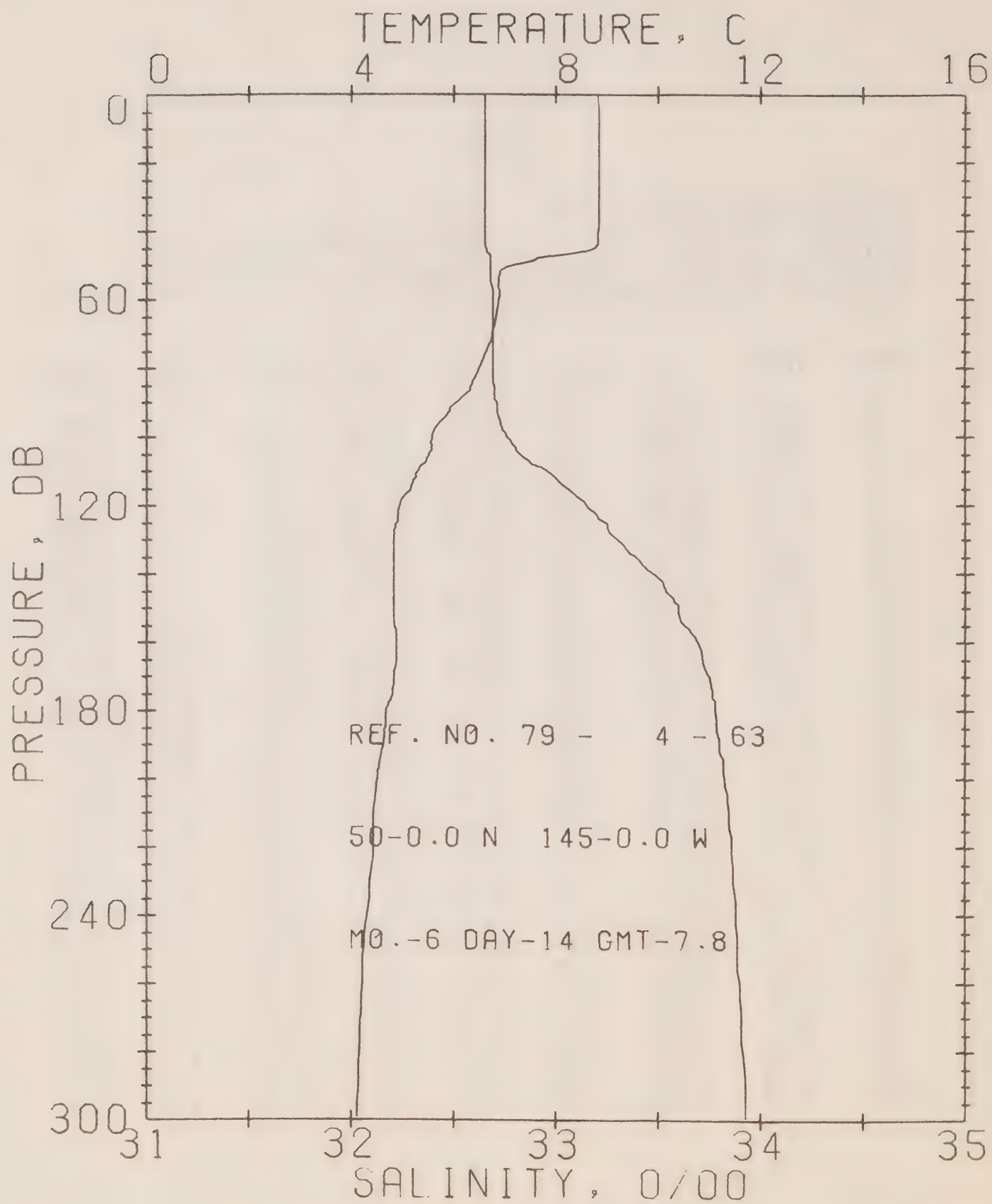
GMT 6.4

STATION W3

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.76	32.61	0	25.31	267.2	.00	.00	1483.
10	8.76	32.61	10	25.31	267.4	.27	.01	1483.
20	8.77	32.61	20	25.31	267.7	.53	.05	1483.
30	8.77	32.61	30	25.31	267.8	.80	.12	1483.
40	8.76	32.61	40	25.31	267.9	1.07	.22	1483.
50	8.71	32.61	50	25.32	267.3	1.34	.34	1483.
60	6.92	32.63	60	25.59	241.5	1.59	.48	1477.
70	6.87	32.65	70	25.61	239.5	1.83	.64	1477.
80	6.79	32.66	80	25.63	237.8	2.07	.82	1476.
90	6.26	32.66	89	25.70	231.4	2.30	1.03	1474.
100	5.73	32.66	99	25.76	225.2	2.53	1.25	1473.
110	5.32	32.76	109	25.89	213.2	2.75	1.48	1471.
120	4.82	32.98	119	26.12	191.3	2.95	1.72	1470.
130	4.51	33.11	129	26.26	178.5	3.14	1.95	1469.
140	4.43	33.26	139	26.38	166.4	3.31	2.19	1469.
150	4.42	33.45	149	26.54	151.8	3.47	2.42	1469.
160	4.46	33.59	159	26.64	142.2	3.61	2.65	1469.
170	4.63	33.72	169	26.73	134.3	3.75	2.88	1471.
180	4.53	33.75	179	26.76	131.4	3.88	3.12	1470.
190	4.44	33.77	189	26.79	128.8	4.01	3.37	1470.
200	4.39	33.80	199	26.81	126.1	4.14	3.62	1470.
210	4.35	33.82	209	26.83	124.3	4.27	3.88	1470.
220	4.29	33.82	218	26.84	123.6	4.39	4.15	1470.
230	4.26	33.83	228	26.85	122.7	4.51	4.44	1470.
240	4.18	33.83	238	26.86	122.0	4.64	4.73	1470.
250	4.09	33.84	248	26.88	120.4	4.76	5.03	1470.
260	4.05	33.84	258	26.88	120.0	4.88	5.34	1470.
270	3.97	33.84	268	26.89	119.3	5.00	5.67	1470.
280	3.98	33.85	278	26.90	118.7	5.12	6.00	1470.
290	3.91	33.86	288	26.91	117.2	5.23	6.34	1470.
300	3.88	33.88	298	26.93	115.8	5.35	6.69	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 63

DATE 14/ 6/79

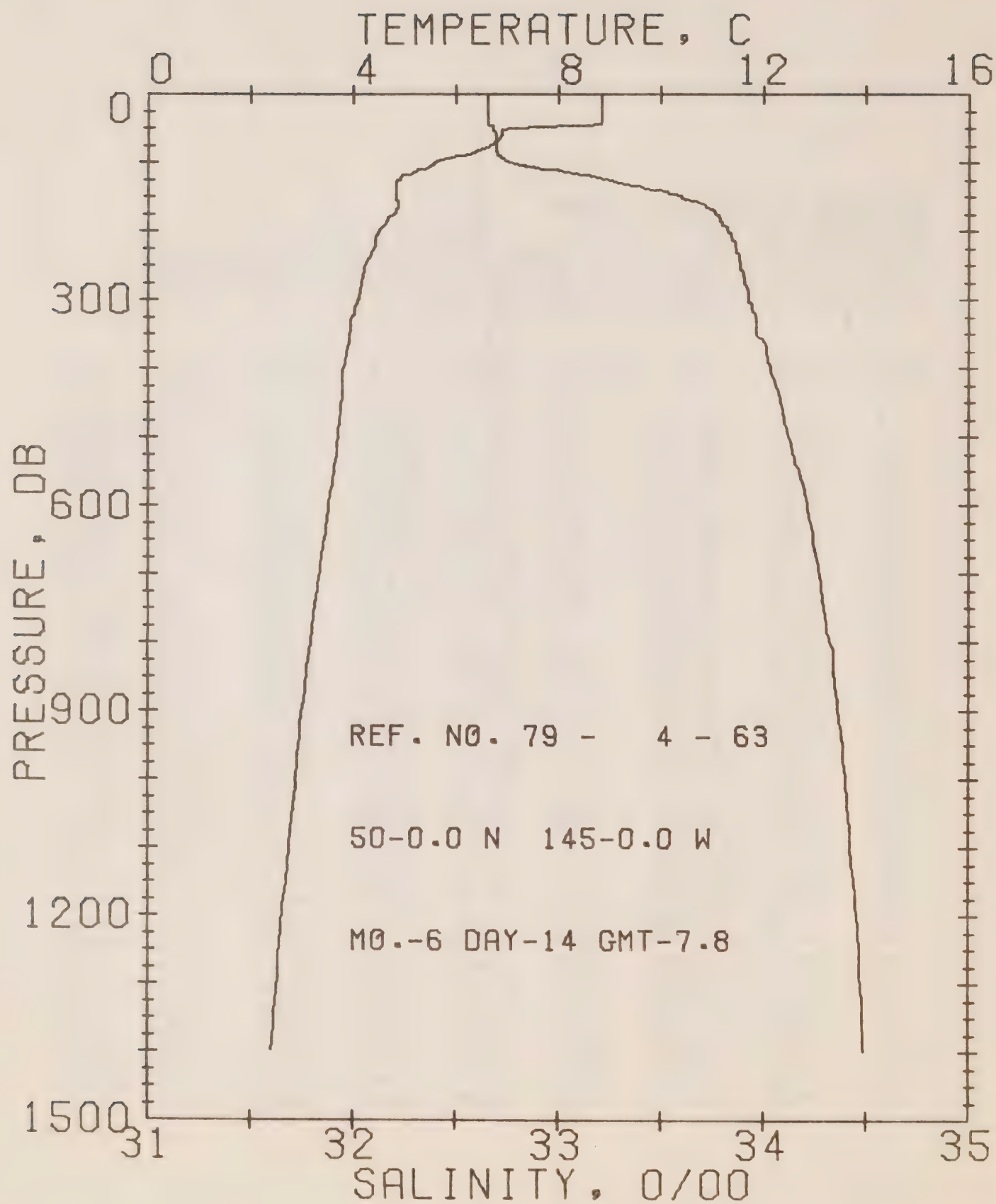
POSITION 50- .0N, 145- .0W GMT 7.8

STATION P

RESULTS OF STP CAST 154 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.84	32.65	0	25.33	265.4	.00	.00	1483.
10	8.85	32.65	10	25.33	265.8	.27	.01	1483.
20	8.85	32.65	20	25.33	265.9	.53	.05	1483.
30	8.85	32.65	30	25.33	266.1	.80	.12	1484.
40	8.85	32.65	40	25.33	266.2	1.06	.22	1484.
50	7.20	32.68	50	25.59	241.2	1.32	.34	1478.
60	6.89	32.69	60	25.64	236.7	1.56	.47	1477.
70	6.75	32.69	70	25.66	235.0	1.80	.63	1476.
80	6.51	32.69	80	25.69	232.1	2.03	.80	1475.
90	6.07	32.71	89	25.76	225.4	2.26	1.00	1474.
100	5.58	32.76	99	25.86	216.0	2.48	1.22	1472.
110	5.32	32.96	109	26.05	198.2	2.69	1.44	1471.
120	4.95	33.15	119	26.24	180.0	2.88	1.66	1470.
130	4.82	33.31	129	26.38	166.7	3.05	1.88	1470.
140	4.84	33.48	139	26.51	154.3	3.21	2.10	1471.
150	4.82	33.60	149	26.61	145.2	3.36	2.32	1471.
160	4.88	33.69	159	26.68	138.8	3.50	2.55	1471.
170	4.83	33.75	169	26.73	134.3	3.64	2.78	1471.
180	4.66	33.78	179	26.77	130.3	3.77	3.02	1471.
190	4.62	33.80	189	26.79	128.5	3.90	3.26	1471.
200	4.50	33.83	199	26.83	125.0	4.03	3.51	1471.
210	4.44	33.85	209	26.85	122.9	4.15	3.77	1471.
220	4.43	33.86	218	26.86	122.2	4.28	4.04	1471.
230	4.36	33.87	228	26.87	120.8	4.40	4.32	1471.
240	4.31	33.88	238	26.89	119.6	4.52	4.61	1471.
250	4.22	33.89	248	26.90	118.0	4.64	4.90	1470.
260	4.21	33.90	258	26.91	117.2	4.75	5.21	1471.
270	4.17	33.91	268	26.93	116.1	4.87	5.52	1470.
280	4.15	33.91	278	26.93	115.6	4.99	5.85	1471.
290	4.12	33.93	288	26.95	114.3	5.10	6.18	1471.
300	4.10	33.93	298	26.95	114.1	5.22	6.53	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 63

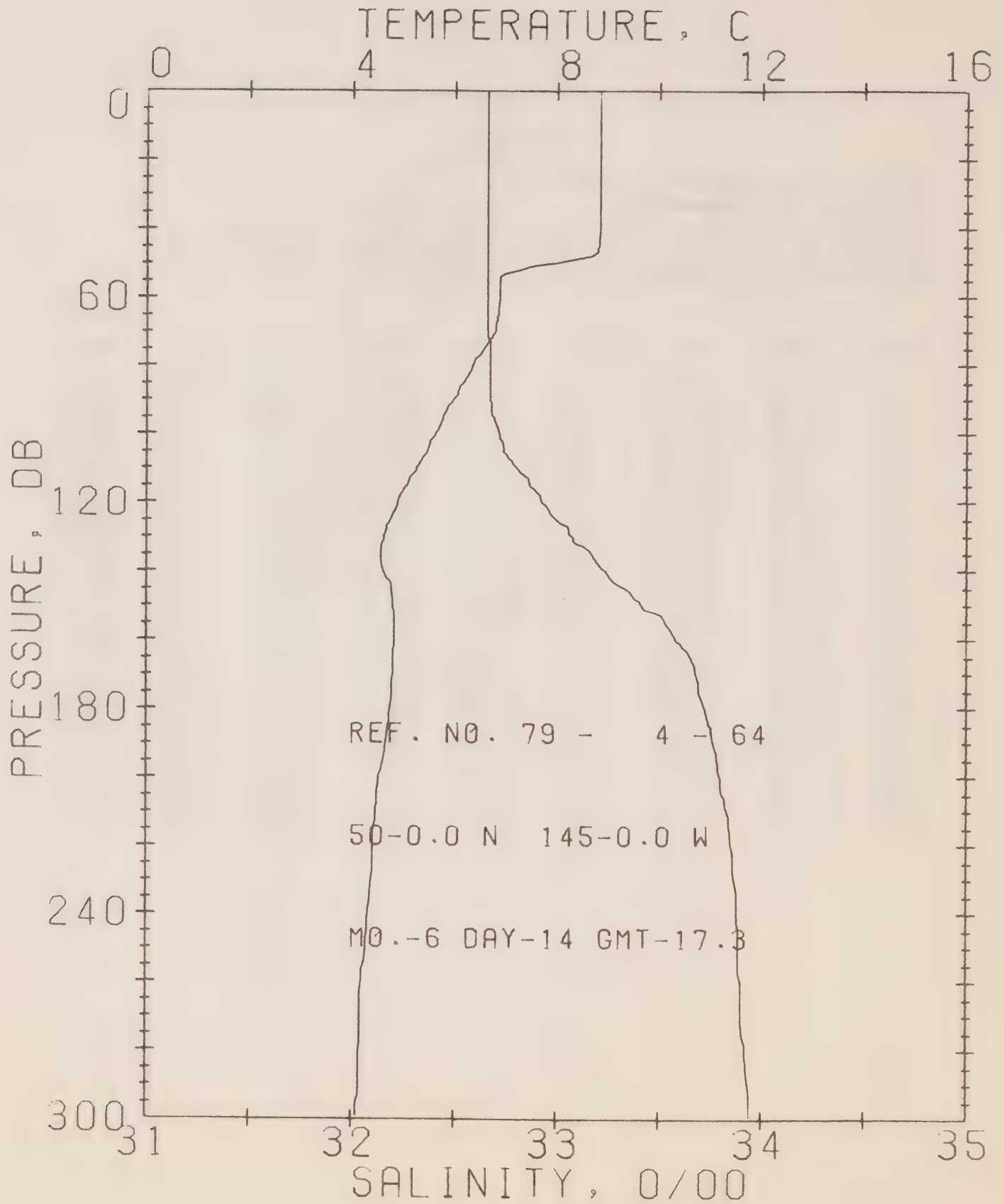
DATE 14/ 6/79

POSITION 50- .0N, 145- .0W GMT 7.8 STATION P

RESULTS OF STP CAST 266 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.84	32.65	0	25.33	265.4	.00	.00	1483.
10	8.85	32.65	10	25.33	265.8	.27	.01	1483.
20	8.85	32.65	20	25.33	265.9	.53	.05	1483.
30	8.85	32.65	30	25.33	266.1	.80	.12	1484.
50	7.20	32.68	50	25.59	241.2	1.32	.34	1478.
75	6.64	32.69	75	25.67	233.6	1.91	.71	1476.
100	5.58	32.76	99	25.86	216.0	2.48	1.22	1472.
125	4.90	33.25	124	26.32	172.0	2.97	1.77	1470.
150	4.82	33.60	149	26.61	145.2	3.36	2.32	1471.
175	4.80	33.77	174	26.75	132.5	3.71	2.90	1471.
200	4.50	33.83	199	26.83	125.0	4.03	3.51	1471.
225	4.40	33.87	223	26.87	121.2	4.34	4.18	1471.
250	4.22	33.89	248	26.90	118.0	4.64	4.90	1470.
300	4.10	33.93	298	26.95	114.1	5.22	6.53	1471.
400	3.81	34.03	397	27.06	104.5	6.31	10.40	1471.
500	3.70	34.12	496	27.14	97.3	7.31	15.02	1473.
600	3.53	34.21	595	27.23	89.6	8.25	20.25	1474.
800	3.16	34.32	793	27.35	78.6	9.93	32.20	1475.
1000	2.88	34.40	990	27.44	71.3	11.42	45.87	1478.
1200	2.61	34.45	1188	27.51	65.4	12.79	61.20	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 64

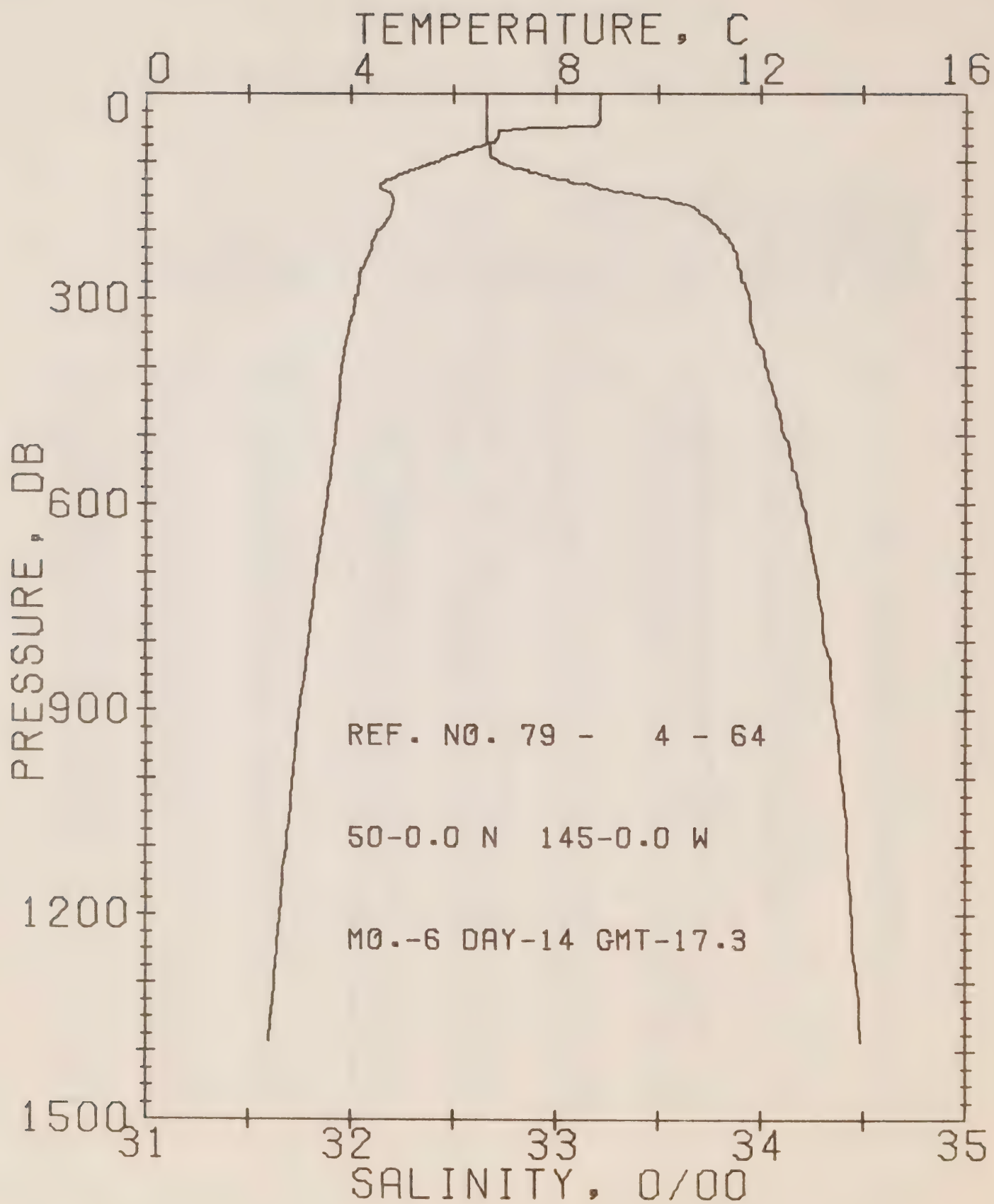
DATE 14/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.85	32.66	0	25.33	264.8	.00	.00	1483.
10	8.85	32.66	10	25.33	265.0	.26	.01	1483.
20	8.85	32.66	20	25.33	265.2	.53	.05	1483.
30	8.85	32.66	30	25.33	265.4	.80	.12	1484.
40	8.85	32.66	40	25.33	265.5	1.06	.22	1484.
50	7.98	32.66	50	25.46	253.2	1.32	.34	1481.
60	6.87	32.66	60	25.62	238.6	1.57	.47	1476.
70	6.80	32.66	70	25.63	237.8	1.80	.63	1476.
80	6.35	32.67	80	25.69	231.6	2.04	.81	1475.
90	5.98	32.67	89	25.74	227.3	2.27	1.01	1473.
100	5.62	32.72	99	25.82	219.4	2.49	1.22	1472.
110	5.24	32.81	109	25.94	208.5	2.71	1.45	1471.
120	4.89	32.93	119	26.07	195.8	2.91	1.69	1470.
130	4.62	33.08	129	26.22	181.8	3.10	1.93	1469.
140	4.60	33.24	139	26.35	169.7	3.27	2.17	1469.
150	4.81	33.42	149	26.47	158.5	3.44	2.42	1471.
160	4.83	33.58	159	26.59	146.9	3.59	2.66	1471.
170	4.80	33.68	169	26.68	139.2	3.73	2.89	1471.
180	4.74	33.72	179	26.72	135.4	3.87	3.14	1471.
190	4.65	33.76	189	26.76	131.4	4.00	3.39	1471.
200	4.52	33.80	199	26.80	127.5	4.13	3.65	1471.
210	4.45	33.84	209	26.84	124.2	4.26	3.91	1471.
220	4.39	33.85	218	26.86	122.3	4.38	4.18	1471.
230	4.37	33.87	228	26.87	120.9	4.50	4.46	1471.
240	4.31	33.88	238	26.89	119.6	4.62	4.75	1471.
250	4.27	33.89	248	26.90	118.5	4.74	5.05	1471.
260	4.18	33.90	258	26.92	116.9	4.86	5.35	1470.
270	4.15	33.90	268	26.92	116.7	4.98	5.67	1470.
280	4.14	33.92	278	26.94	115.2	5.09	5.99	1471.
290	4.12	33.94	288	26.95	113.9	5.21	6.33	1471.
300	4.06	33.94	298	26.96	113.0	5.32	6.67	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 64

DATE 14/ 6/79

POSITION 50- .0N, 145- .0W

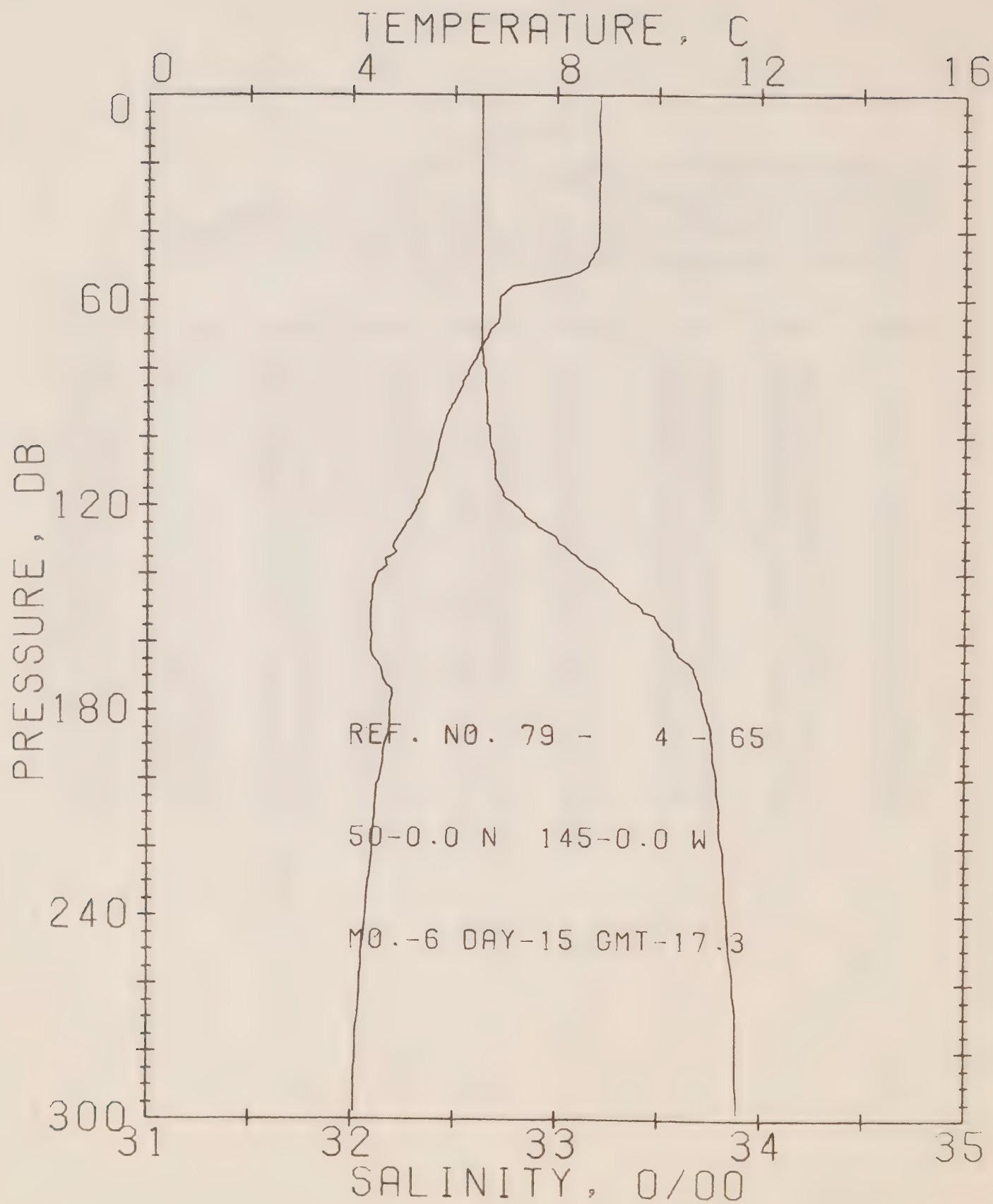
GMT 17.3

STATION P

RESULTS OF STP CAST 281 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.85	32.66	0	25.33	264.8	.00	.00	1483.
10	8.85	32.66	10	25.33	265.0	.26	.01	1483.
20	8.85	32.66	20	25.33	265.2	.53	.05	1483.
30	8.85	32.66	30	25.33	265.4	.80	.12	1484.
50	7.98	32.66	50	25.46	253.2	1.32	.34	1481.
75	6.55	32.67	75	25.67	234.0	1.92	.72	1475.
100	5.62	32.72	99	25.82	219.4	2.49	1.22	1472.
125	4.75	33.00	124	26.14	189.1	3.00	1.81	1469.
150	4.81	33.42	149	26.47	158.5	3.44	2.42	1471.
175	4.78	33.69	174	26.69	138.3	3.80	3.02	1471.
200	4.52	33.80	199	26.80	127.5	4.13	3.65	1471.
225	4.39	33.86	223	26.86	121.8	4.44	4.32	1471.
250	4.27	33.89	248	26.90	118.5	4.74	5.05	1471.
300	4.06	33.94	298	26.96	113.0	5.32	6.67	1471.
400	3.81	34.02	397	27.05	105.2	6.42	10.57	1471.
500	3.69	34.11	496	27.13	98.2	7.43	15.22	1473.
600	3.52	34.20	595	27.22	90.2	8.37	20.48	1474.
800	3.17	34.31	793	27.34	79.8	10.05	32.45	1476.
1000	2.86	34.40	990	27.44	71.3	11.55	46.19	1478.
1200	2.61	34.44	1188	27.50	66.2	12.92	61.54	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 65

DATE 15/ 6/79

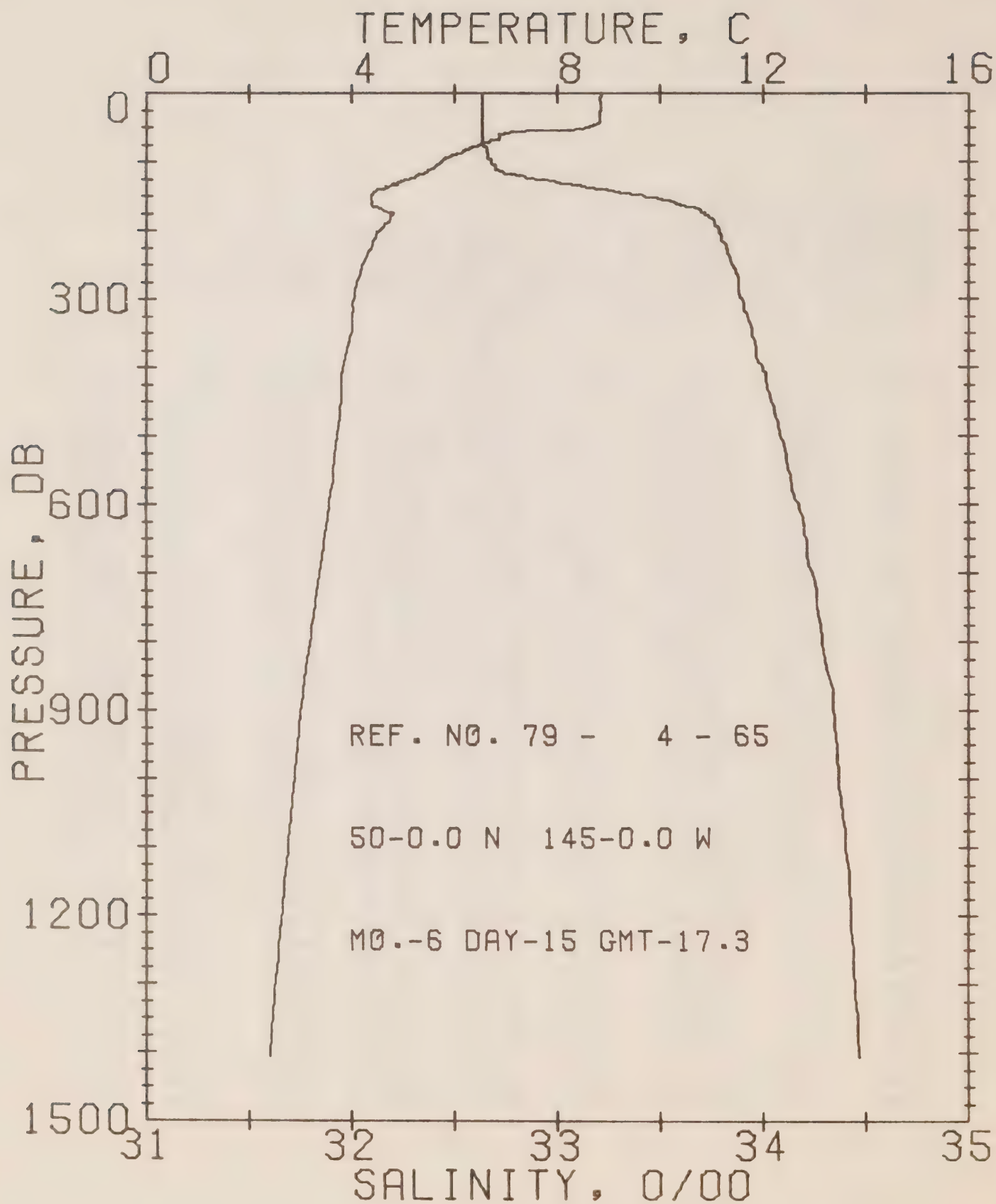
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.85	32.63	0	25.31	267.1	.00	.00	1483.
10	8.84	32.63	10	25.31	267.1	.27	.01	1483.
20	8.85	32.63	20	25.31	267.4	.53	.05	1483.
30	8.83	32.63	30	25.31	267.3	.80	.12	1483.
40	8.82	32.63	40	25.32	267.3	1.07	.22	1484.
50	8.61	32.63	50	25.35	264.4	1.34	.34	1483.
60	6.88	32.63	60	25.59	241.0	1.59	.48	1476.
70	6.67	32.63	70	25.62	238.4	1.83	.64	1476.
80	6.29	32.65	80	25.69	232.4	2.06	.82	1474.
90	5.99	32.66	89	25.73	228.1	2.29	1.02	1473.
100	5.74	32.67	99	25.77	224.6	2.52	1.24	1473.
110	5.56	32.70	109	25.81	220.4	2.74	1.48	1472.
120	5.27	32.80	119	25.93	209.7	2.96	1.73	1471.
130	4.87	33.01	129	26.13	190.1	3.16	1.99	1470.
140	4.50	33.22	139	26.34	170.1	3.34	2.24	1469.
150	4.37	33.42	149	26.52	153.9	3.50	2.48	1469.
160	4.38	33.57	159	26.63	142.8	3.65	2.71	1469.
170	4.60	33.68	169	26.70	136.8	3.79	2.94	1470.
180	4.76	33.73	179	26.72	135.1	3.93	3.19	1471.
190	4.65	33.77	189	26.76	131.0	4.06	3.44	1471.
200	4.54	33.79	199	26.79	128.4	4.19	3.70	1471.
210	4.46	33.80	209	26.81	126.9	4.32	3.96	1471.
220	4.40	33.82	218	26.83	125.2	4.44	4.24	1471.
230	4.33	33.83	228	26.84	123.5	4.57	4.52	1470.
240	4.27	33.84	238	26.86	122.2	4.69	4.82	1470.
250	4.21	33.85	248	26.87	120.9	4.81	5.12	1470.
260	4.17	33.87	258	26.89	119.0	4.93	5.43	1470.
270	4.12	33.88	268	26.91	117.9	5.05	5.75	1470.
280	4.07	33.88	278	26.91	117.5	5.17	6.08	1470.
290	4.05	33.88	288	26.91	117.3	5.29	6.42	1470.
300	4.05	33.89	298	26.93	116.2	5.40	6.78	1470.



OFFSHORE OCEANOGRAPH, GROUP

REFERENCE NO. 79- 4- 65

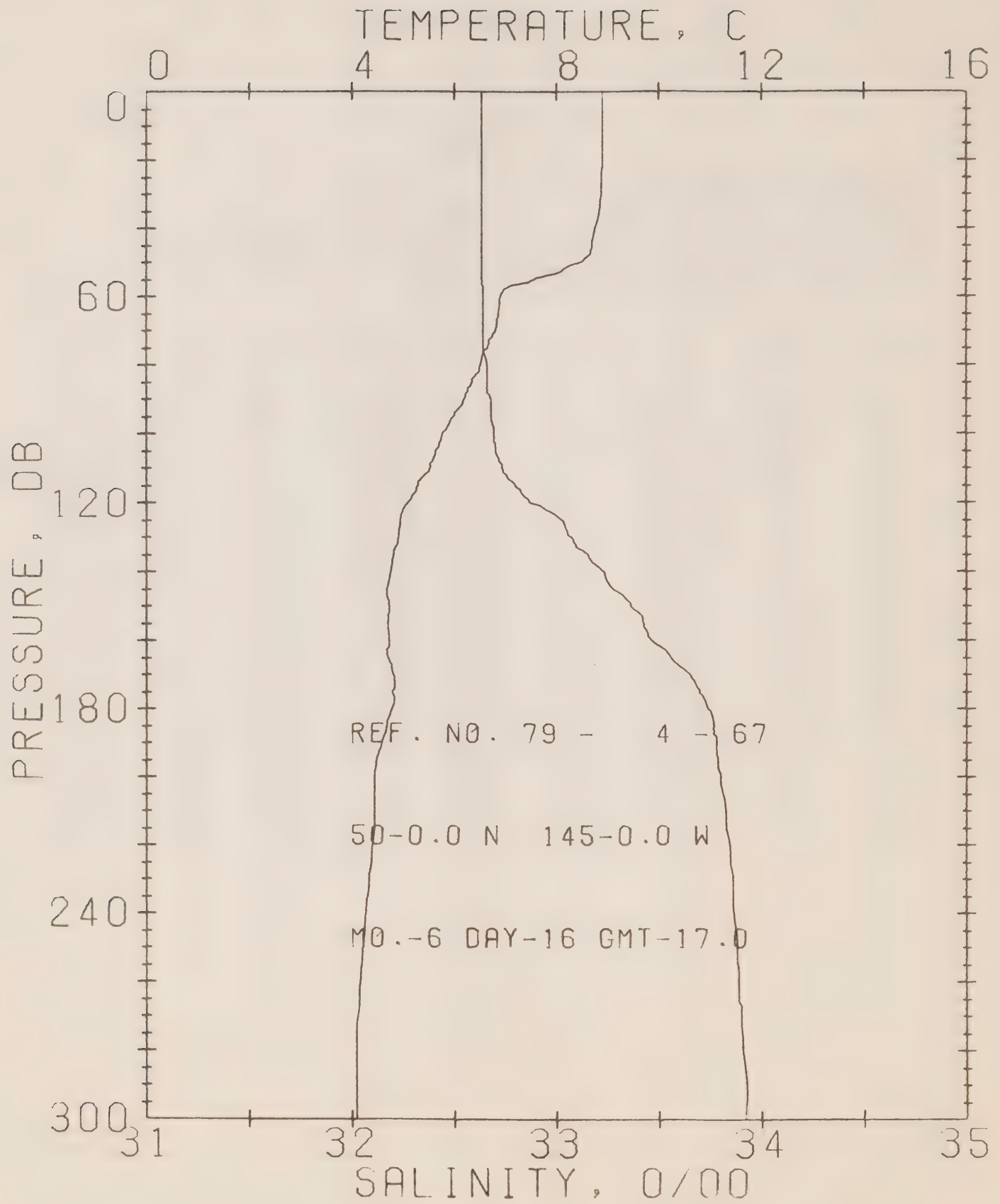
DATE 15/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 278 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.85	32.63	0	25.31	267.1	.00	.00	1483.
10	8.84	32.63	10	25.31	267.1	.27	.01	1483.
20	8.85	32.63	20	25.31	267.4	.53	.05	1483.
30	8.83	32.63	30	25.31	267.3	.80	.12	1483.
50	8.61	32.63	50	25.35	264.4	1.34	.34	1483.
75	6.49	32.63	75	25.65	235.8	1.95	.73	1475.
100	5.74	32.67	99	25.77	224.6	2.52	1.24	1473.
125	5.08	32.90	124	26.03	200.2	3.06	1.86	1471.
150	4.37	33.42	149	26.52	153.9	3.50	2.48	1469.
175	4.80	33.71	174	26.70	136.9	3.86	3.06	1471.
200	4.54	33.79	199	26.79	128.4	4.19	3.70	1471.
225	4.37	33.82	223	26.83	124.6	4.51	4.38	1470.
250	4.21	33.85	248	26.87	120.9	4.81	5.12	1470.
300	4.05	33.89	298	26.93	116.2	5.40	6.78	1470.
400	3.83	34.00	397	27.03	107.1	6.52	10.76	1471.
500	3.71	34.08	496	27.11	100.2	7.56	15.51	1473.
600	3.55	34.17	595	27.19	92.9	8.53	20.94	1474.
800	3.17	34.29	793	27.33	81.3	10.26	33.28	1475.
1000	2.87	34.37	990	27.42	73.4	11.79	47.30	1478.
1200	2.62	34.43	1188	27.49	67.4	13.20	63.02	1480.



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REFERENCE NO. 79- 4- 67

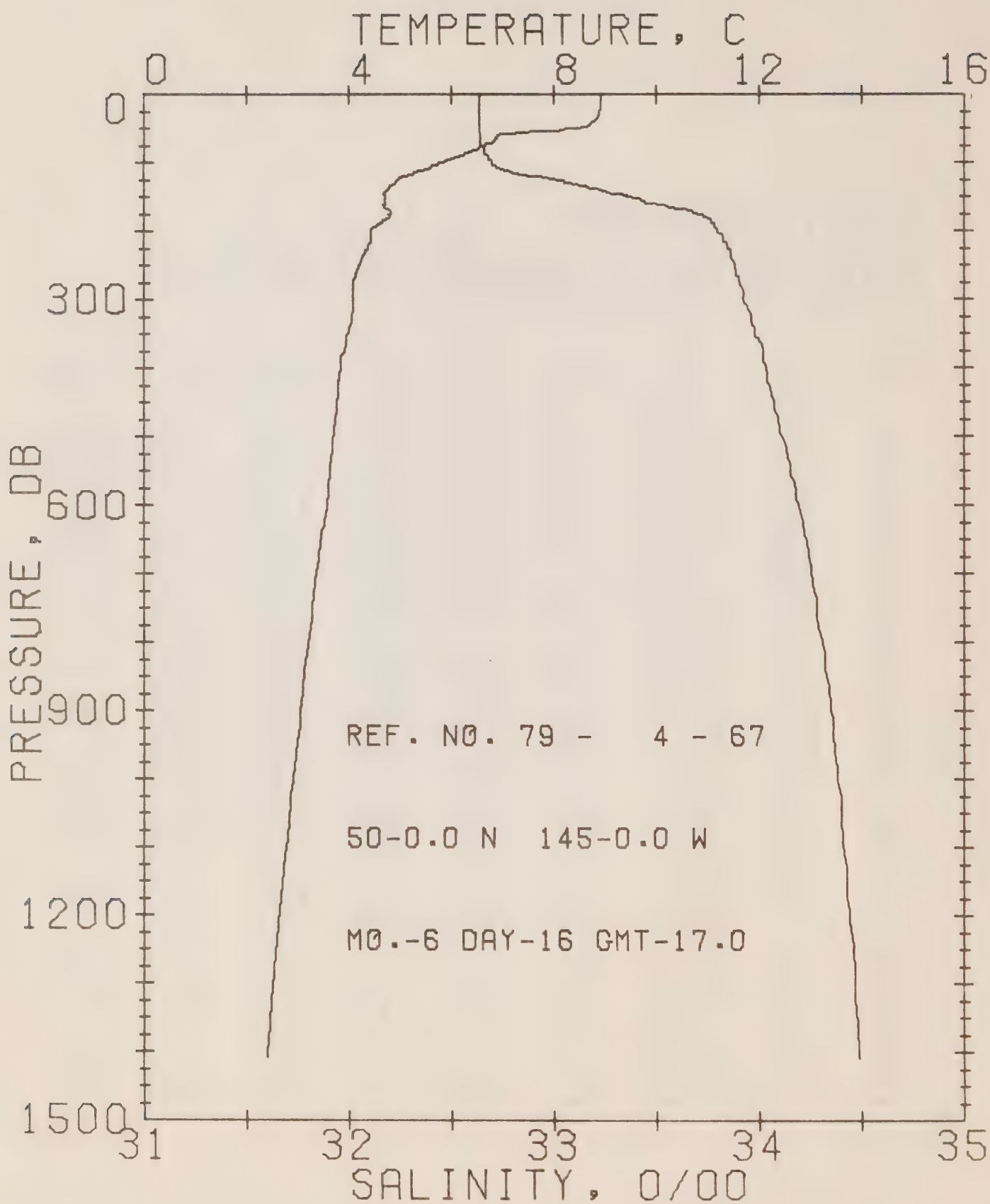
DATE 16/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.0 STATION P

RESULTS OF STP CAST 188 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.91	32.63	0	25.30	268.0	.00	.00	1483.
10	8.91	32.63	10	25.30	268.1	.27	.01	1483.
20	8.90	32.63	20	25.30	268.1	.54	.05	1484.
30	8.87	32.63	30	25.31	267.9	.80	.12	1484.
40	8.74	32.63	40	25.33	266.1	1.07	.22	1483.
50	8.48	32.63	50	25.37	262.5	1.34	.34	1482.
60	6.90	32.64	60	25.60	240.5	1.59	.48	1477.
70	6.80	32.64	70	25.61	239.3	1.83	.64	1476.
80	6.50	32.66	80	25.67	234.2	2.06	.82	1475.
90	6.20	32.68	89	25.72	229.2	2.30	1.02	1474.
100	5.76	32.69	99	25.78	223.3	2.52	1.24	1473.
110	5.51	32.73	109	25.84	217.5	2.74	1.48	1472.
120	5.10	32.87	119	26.00	202.6	2.95	1.72	1471.
130	4.90	33.07	129	26.18	185.5	3.14	1.97	1470.
140	4.75	33.23	139	26.32	172.0	3.32	2.21	1470.
150	4.73	33.36	149	26.43	162.2	3.49	2.46	1470.
160	4.72	33.47	159	26.52	153.9	3.65	2.71	1470.
170	4.79	33.65	169	26.65	141.3	3.79	2.96	1471.
180	4.79	33.74	179	26.72	134.6	3.93	3.20	1471.
190	4.57	33.78	189	26.78	129.4	4.06	3.45	1471.
200	4.44	33.80	199	26.81	126.6	4.19	3.70	1470.
210	4.43	33.83	209	26.83	124.6	4.32	3.97	1471.
220	4.39	33.85	218	26.85	122.7	4.44	4.24	1471.
230	4.33	33.86	228	26.87	121.2	4.56	4.52	1470.
240	4.25	33.86	238	26.88	120.1	4.68	4.81	1470.
250	4.21	33.88	248	26.90	118.6	4.80	5.10	1470.
260	4.15	33.89	258	26.91	117.4	4.92	5.41	1470.
270	4.11	33.90	268	26.92	116.3	5.04	5.73	1470.
280	4.07	33.91	278	26.94	115.2	5.15	6.05	1470.
290	4.07	33.93	288	26.95	114.0	5.27	6.38	1470.
300	4.08	33.92	298	26.94	114.7	5.38	6.73	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 67

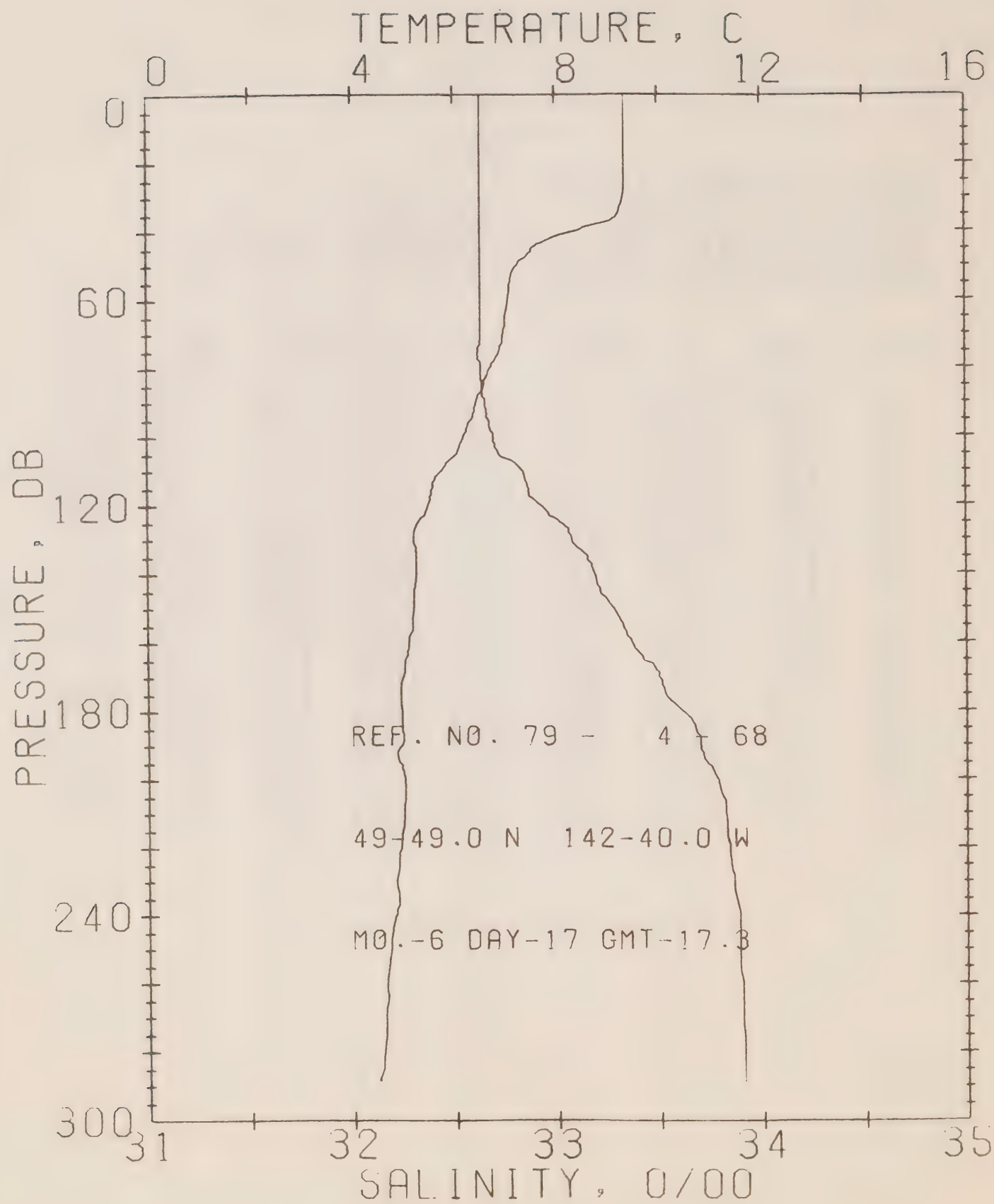
DATE 16/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.0 STATION P

RESULTS OF STP CAST 310 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.91	32.63	0	25.30	268.0	.00	.00	1483.
10	8.91	32.63	10	25.30	268.1	.27	.01	1483.
20	8.90	32.63	20	25.30	268.1	.54	.05	1484.
30	8.87	32.63	30	25.31	267.9	.80	.12	1484.
50	8.48	32.63	50	25.37	262.5	1.34	.34	1482.
75	6.64	32.64	75	25.63	237.4	1.95	.73	1476.
100	5.76	32.69	99	25.78	223.3	2.52	1.24	1473.
125	4.94	33.03	124	26.15	188.9	3.05	1.84	1470.
150	4.73	33.36	149	26.43	162.2	3.49	2.46	1470.
175	4.78	33.70	174	26.69	137.5	3.86	3.08	1471.
200	4.44	33.80	199	26.81	126.6	4.19	3.70	1470.
225	4.36	33.85	223	26.86	122.2	4.50	4.38	1470.
250	4.21	33.88	248	26.90	118.6	4.80	5.10	1470.
300	4.08	33.92	298	26.94	114.7	5.38	6.73	1471.
400	3.84	34.03	397	27.05	104.8	6.48	10.61	1471.
500	3.70	34.11	496	27.13	98.0	7.49	15.27	1473.
600	3.57	34.19	595	27.21	91.8	8.44	20.57	1474.
800	3.19	34.31	793	27.34	80.2	10.15	32.75	1476.
1000	2.91	34.38	990	27.42	73.1	11.68	46.72	1478.
1200	2.63	34.44	1188	27.49	66.8	13.07	62.31	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 68

DATE 17/ 6/79

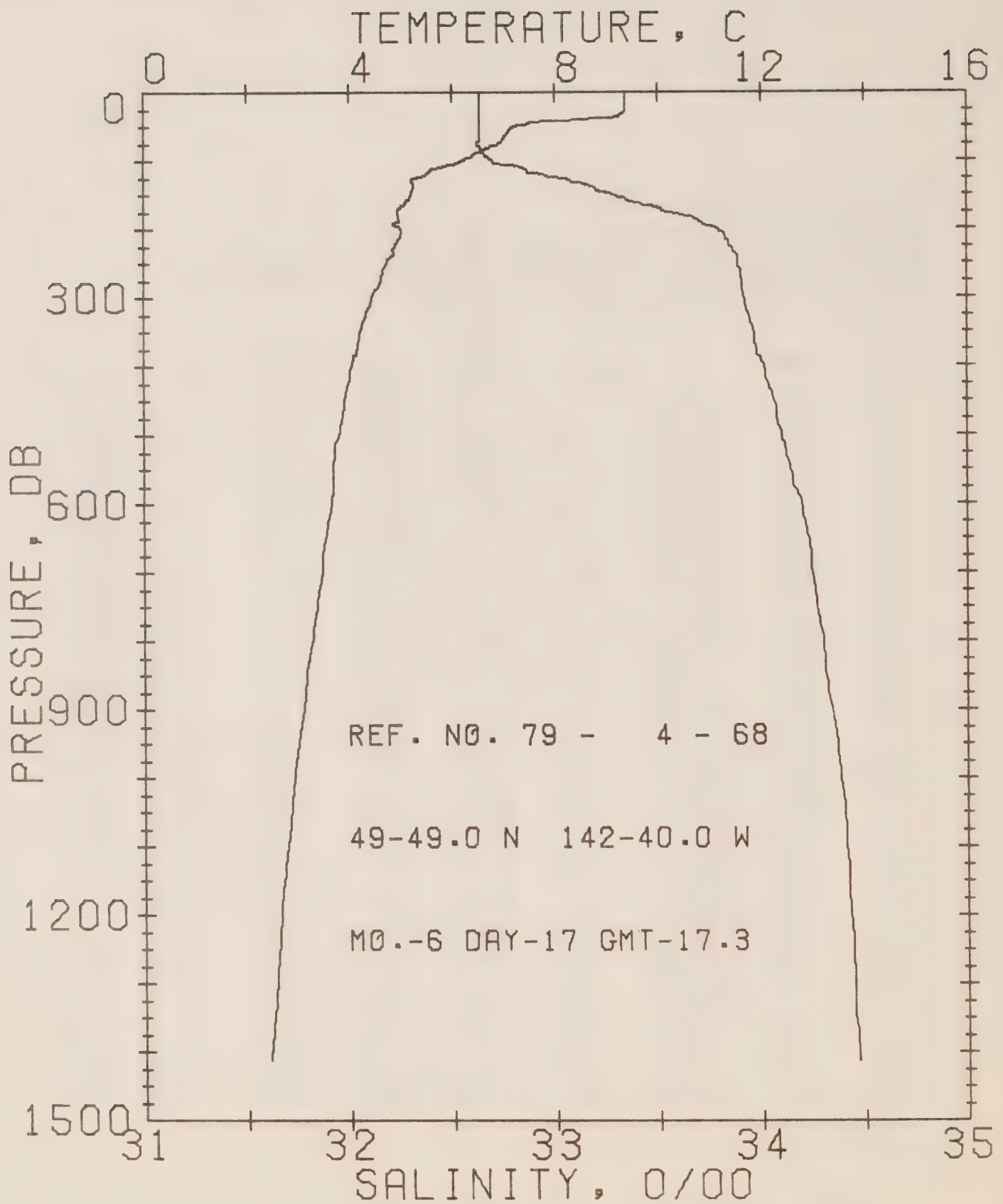
POSITION 49-49.0N, 142-40.0W GMT 17.3

STATION 12

RESULTS OF STP CAST 193 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.37	32.63	0	25.23	274.8	.00	.00	1485.
10	9.37	32.63	10	25.23	275.0	.27	.01	1485.
20	9.37	32.63	20	25.23	275.2	.55	.06	1485.
30	9.34	32.63	30	25.23	274.9	.83	.13	1485.
40	8.45	32.63	40	25.37	261.9	1.10	.22	1482.
50	7.24	32.63	50	25.55	245.5	1.35	.34	1478.
60	7.08	32.63	60	25.57	243.5	1.59	.47	1477.
70	6.98	32.63	70	25.58	242.3	1.83	.64	1477.
80	6.71	32.63	80	25.62	239.1	2.08	.82	1476.
90	6.44	32.65	89	25.67	234.3	2.31	1.03	1475.
100	6.20	32.69	99	25.73	228.5	2.54	1.25	1474.
110	5.75	32.84	109	25.90	212.1	2.77	1.49	1473.
120	5.48	32.93	119	26.01	202.3	2.97	1.73	1472.
130	5.20	33.07	129	26.15	188.5	3.17	1.98	1471.
140	5.25	33.18	139	26.23	181.0	3.35	2.23	1472.
150	5.19	33.28	149	26.31	173.2	3.53	2.49	1472.
160	5.10	33.37	159	26.40	165.5	3.70	2.76	1472.
170	4.98	33.50	169	26.51	154.6	3.86	3.03	1472.
180	4.95	33.61	179	26.60	146.2	4.01	3.30	1472.
190	4.96	33.70	189	26.67	139.6	4.15	3.57	1472.
200	5.00	33.79	199	26.74	133.5	4.29	3.84	1473.
210	4.99	33.82	209	26.77	130.9	4.42	4.12	1473.
220	4.93	33.84	218	26.79	129.1	4.55	4.40	1473.
230	4.83	33.86	228	26.81	126.6	4.68	4.69	1473.
240	4.82	33.89	238	26.84	124.4	4.81	5.00	1473.
250	4.71	33.89	248	26.85	123.3	4.93	5.30	1472.
260	4.64	33.90	258	26.87	121.9	5.05	5.62	1472.
270	4.61	33.90	268	26.87	121.6	5.17	5.95	1472.
280	4.58	33.91	278	26.88	120.6	5.30	6.29	1472.
290	4.48	33.91	288	26.89	119.6	5.42	6.64	1472.
300	4.44	33.92	298	26.90	118.9	5.53	7.00	1472.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 68

DATE 17/ 6/79

POSITION 49-49.0N, 142-40.0W

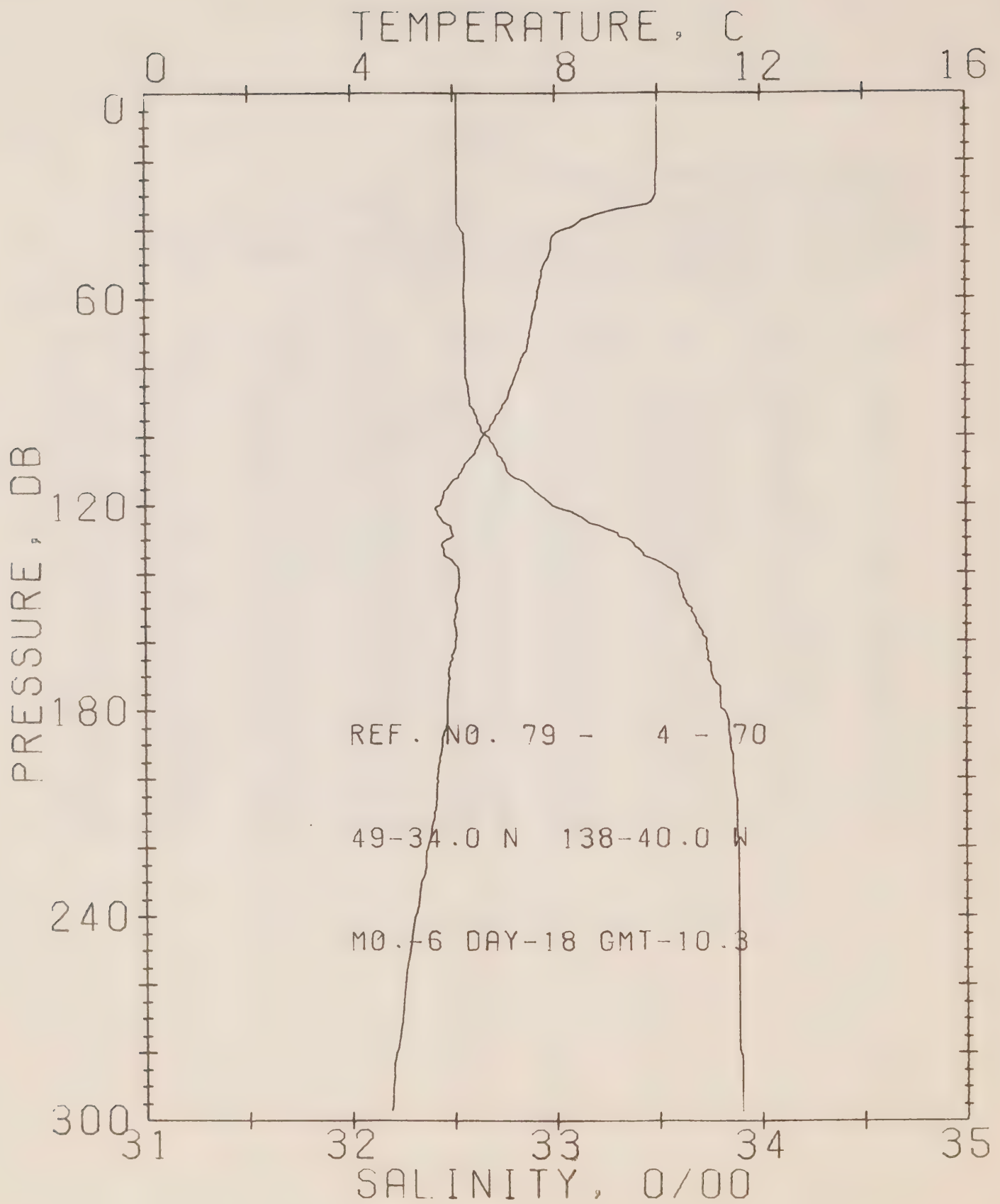
GMT 17.3

STATION 12

RESULTS OF STP CAST 324 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.37	32.63	0	25.23	274.8	.00	.00	1485.
10	9.37	32.63	10	25.23	275.0	.27	.01	1485.
20	9.37	32.63	20	25.23	275.2	.55	.06	1485.
30	9.34	32.63	30	25.23	274.9	.83	.13	1485.
50	7.24	32.63	50	25.55	245.5	1.35	.34	1478.
75	6.88	32.62	75	25.59	242.0	1.96	.73	1477.
100	6.20	32.69	99	25.73	228.5	2.54	1.25	1474.
125	5.29	33.02	124	26.10	193.5	3.07	1.85	1472.
150	5.19	33.28	149	26.31	173.2	3.53	2.49	1472.
175	4.93	33.53	174	26.54	151.9	3.94	3.17	1472.
200	5.00	33.79	199	26.74	133.5	4.29	3.84	1473.
225	4.89	33.85	223	26.80	128.0	4.62	4.55	1473.
250	4.71	33.89	248	26.85	123.3	4.93	5.30	1472.
300	4.44	33.92	298	26.90	118.9	5.53	7.00	1472.
400	4.03	34.01	397	27.02	108.3	6.67	11.05	1472.
500	3.79	34.10	496	27.11	99.8	7.71	15.81	1473.
600	3.65	34.19	595	27.20	92.4	8.67	21.20	1474.
800	3.26	34.30	793	27.33	81.5	10.41	33.54	1476.
1000	2.91	34.38	990	27.42	73.1	11.95	47.66	1478.
1200	2.64	34.43	1188	27.49	67.5	13.35	63.31	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 70

DATE 18/ 6/79

POSITION 49-34.0N, 138-40.0W

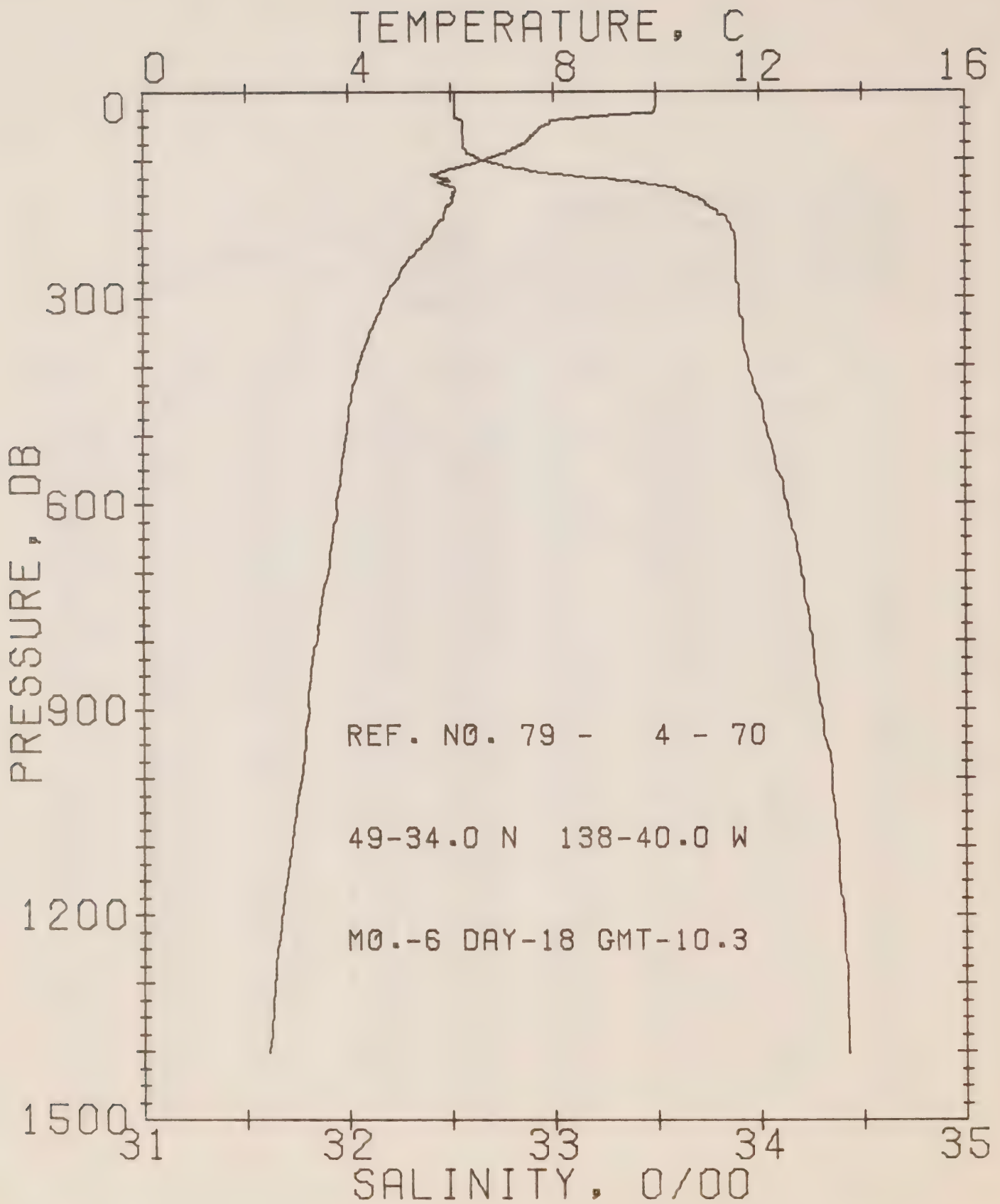
GMT 10.3

STATION 10

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.99	32.52	0	25.04	292.6	.00	.00	1487.
10	9.99	32.52	10	25.04	292.8	.29	.01	1487.
20	9.99	32.52	20	25.04	293.0	.59	.06	1488.
30	9.96	32.52	30	25.05	292.7	.88	.13	1488.
40	8.17	32.54	40	25.34	264.6	1.16	.23	1481.
50	7.79	32.56	50	25.41	258.0	1.42	.35	1480.
60	7.65	32.55	60	25.43	257.0	1.68	.50	1479.
70	7.49	32.56	70	25.46	254.3	1.93	.67	1479.
80	7.28	32.56	80	25.49	251.6	2.18	.86	1478.
90	7.01	32.58	89	25.54	246.7	2.43	1.08	1477.
100	6.55	32.67	99	25.67	234.3	2.67	1.31	1476.
110	6.15	32.76	109	25.79	222.8	2.90	1.55	1475.
120	5.73	32.98	119	26.01	201.5	3.11	1.80	1473.
130	5.86	33.36	129	26.30	174.8	3.30	2.04	1474.
140	6.12	33.59	139	26.45	160.9	3.47	2.27	1476.
150	6.07	33.66	149	26.51	155.2	3.63	2.51	1476.
160	6.02	33.73	159	26.57	149.5	3.78	2.75	1476.
170	5.90	33.76	169	26.61	145.9	3.93	3.00	1476.
180	5.87	33.82	179	26.66	141.2	4.07	3.25	1476.
190	5.76	33.85	189	26.70	137.8	4.21	3.51	1476.
200	5.65	33.87	199	26.73	135.0	4.35	3.79	1475.
210	5.60	33.88	209	26.74	133.8	4.48	4.07	1475.
220	5.46	33.89	218	26.76	131.5	4.62	4.36	1475.
230	5.33	33.89	228	26.78	130.1	4.75	4.66	1475.
240	5.23	33.89	238	26.79	129.1	4.88	4.97	1474.
250	5.12	33.89	248	26.80	127.9	5.01	5.29	1474.
260	5.01	33.89	258	26.82	126.8	5.13	5.62	1474.
270	4.96	33.89	268	26.82	126.2	5.26	5.96	1474.
280	4.85	33.89	278	26.84	124.8	5.39	6.32	1473.
290	4.79	33.90	288	26.85	123.8	5.51	6.68	1473.
300	4.71	33.90	298	26.86	123.0	5.63	7.05	1473.



OFFSHORE OCEANOGRAPH GROUP

REFERENCE NO. 79- 4- 70

DATE 18/ 6/79

POSITION 49-34.0N, 138-40.0W

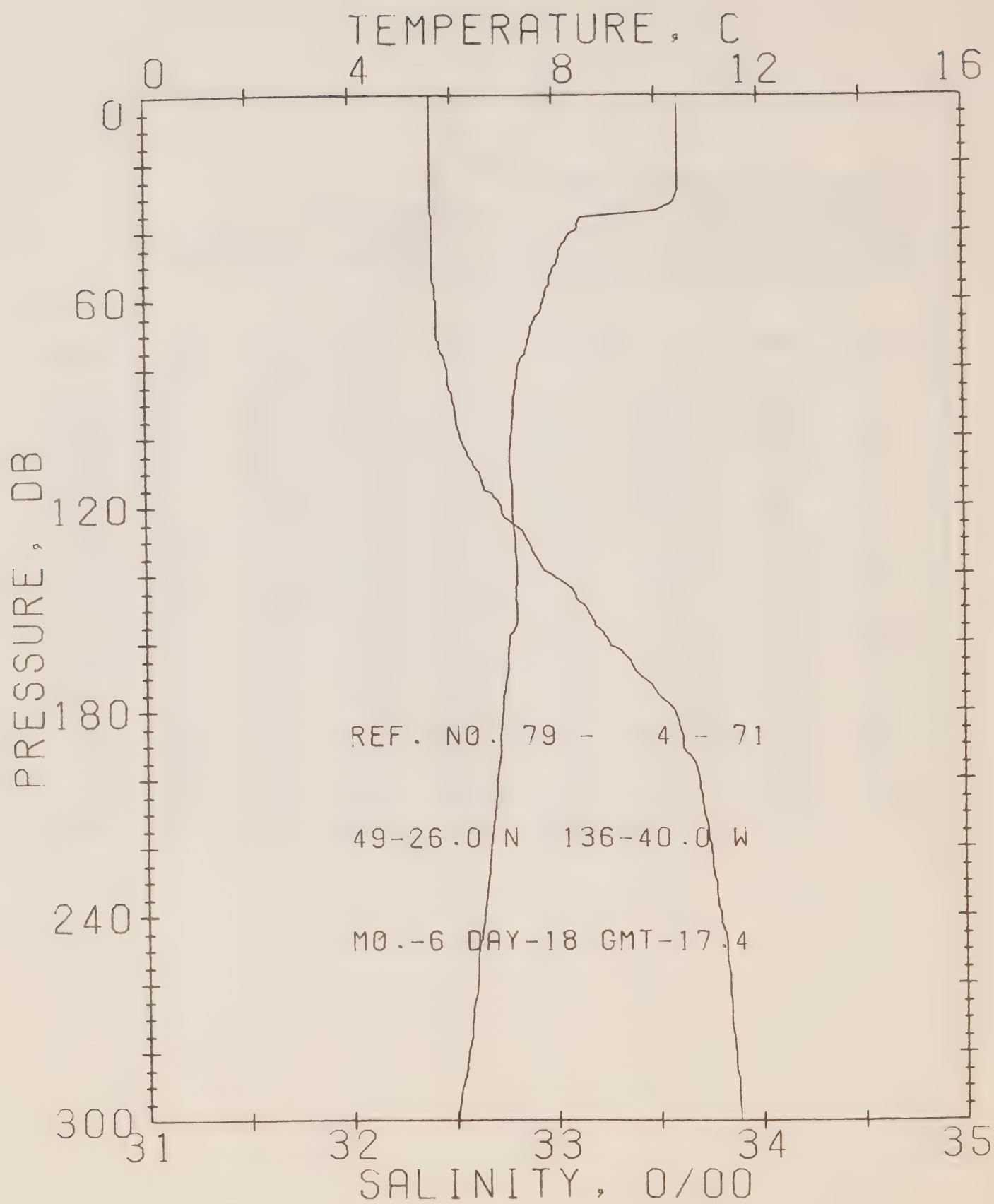
GMT 10.3

STATION 10

RESULTS OF STP CAST 350 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.99	32.52	0	25.04	292.6	.00	.00	1487.
10	9.99	32.52	10	25.04	292.8	.29	.01	1487.
20	9.99	32.52	20	25.04	293.0	.59	.06	1488.
30	9.96	32.52	30	25.05	292.7	.88	.13	1488.
50	7.79	32.56	50	25.41	258.0	1.42	.35	1480.
75	7.43	32.56	75	25.46	253.5	2.06	.76	1479.
100	6.55	32.67	99	25.67	234.3	2.67	1.31	1476.
125	5.81	33.16	124	26.15	189.1	3.21	1.92	1474.
150	6.07	33.66	149	26.51	155.2	3.63	2.51	1476.
175	5.88	33.80	174	26.64	142.8	4.00	3.12	1476.
200	5.65	33.87	199	26.73	135.0	4.35	3.79	1475.
225	5.43	33.89	223	26.77	131.3	4.68	4.51	1475.
250	5.12	33.89	248	26.80	127.9	5.01	5.29	1474.
300	4.71	33.90	298	26.86	123.0	5.63	7.05	1473.
400	4.19	33.95	397	26.95	114.5	6.82	11.28	1473.
500	3.96	34.04	496	27.05	106.4	7.92	16.32	1474.
600	3.76	34.13	595	27.14	98.1	8.94	22.04	1474.
800	3.37	34.25	793	27.28	86.4	10.78	35.11	1476.
1000	3.05	34.35	990	27.38	76.9	12.41	50.05	1478.
1200	2.68	34.41	1188	27.46	69.8	13.88	66.51	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 71

DATE 18/ 6/79

POSITION 49-26.0N, 136-40.0W

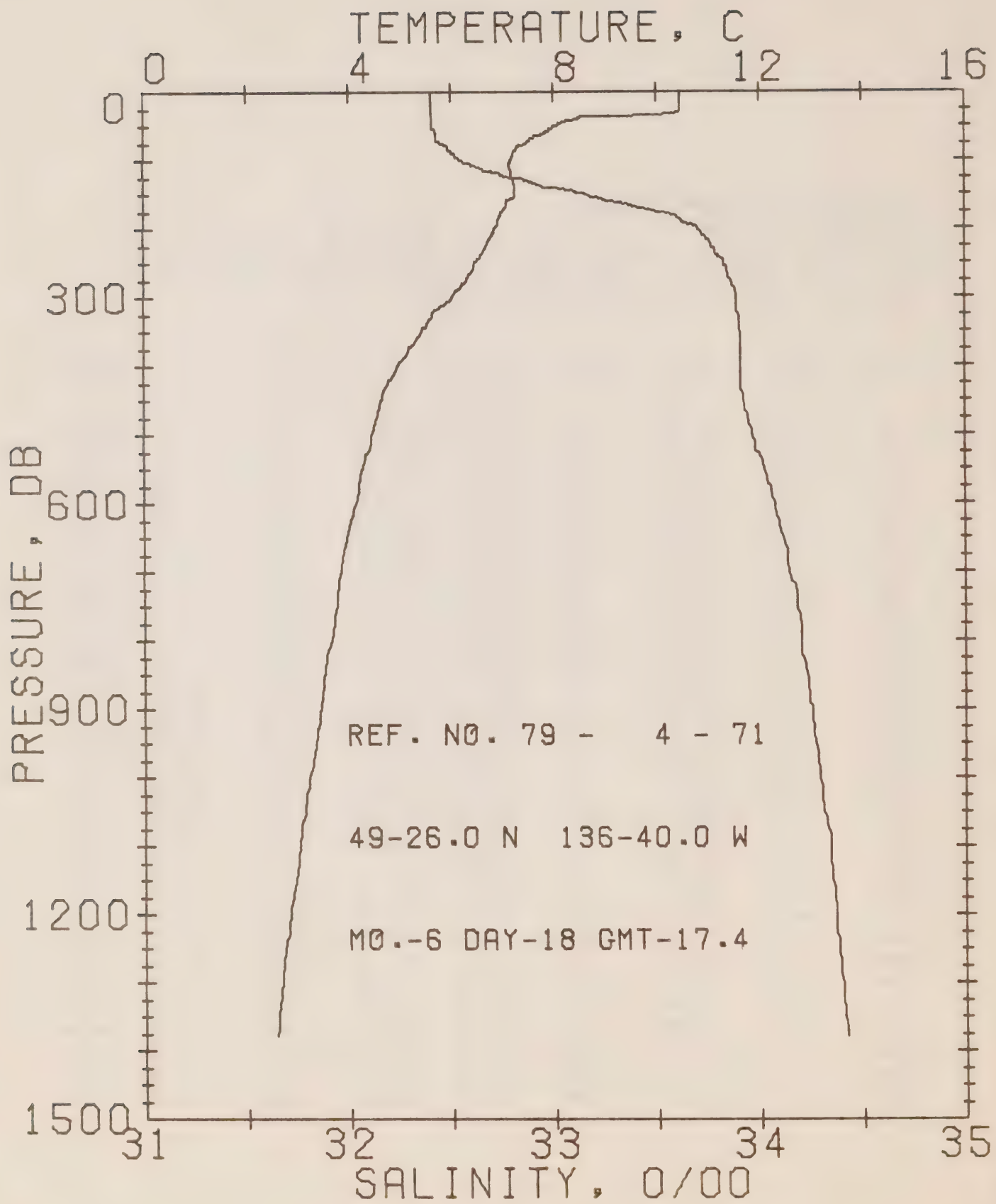
GMT 17.4

STATION 9

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.45	32.40	0	24.87	308.9	.00	.00	1489.
10	10.45	32.40	10	24.87	309.1	.31	.02	1489.
20	10.45	32.40	20	24.87	309.2	.62	.06	1489.
30	10.41	32.40	30	24.88	308.8	.93	.14	1489.
40	8.44	32.41	40	25.20	278.1	1.22	.25	1482.
50	8.05	32.41	50	25.26	272.8	1.49	.37	1481.
60	7.80	32.43	60	25.31	268.0	1.76	.52	1480.
70	7.52	32.43	70	25.35	264.4	2.03	.70	1479.
80	7.29	32.48	80	25.42	257.7	2.29	.90	1478.
90	7.21	32.51	89	25.45	254.9	2.55	1.12	1478.
100	7.15	32.54	99	25.49	251.7	2.80	1.37	1478.
110	7.14	32.63	109	25.56	245.0	3.05	1.63	1478.
120	7.18	32.74	119	25.64	237.4	3.29	1.92	1479.
130	7.22	32.87	129	25.74	228.4	3.53	2.21	1479.
140	7.25	32.99	139	25.83	220.1	3.75	2.52	1480.
150	7.24	33.15	149	25.95	208.2	3.97	2.84	1480.
160	7.09	33.27	159	26.07	197.4	4.17	3.16	1480.
170	7.04	33.42	169	26.19	185.7	4.36	3.48	1480.
180	6.95	33.58	179	26.33	172.8	4.54	3.80	1480.
190	6.91	33.62	189	26.37	169.5	4.71	4.12	1480.
200	6.85	33.70	199	26.44	163.0	4.87	4.45	1480.
210	6.78	33.72	209	26.46	160.6	5.04	4.79	1480.
220	6.70	33.75	219	26.50	157.4	5.20	5.14	1480.
230	6.65	33.78	228	26.53	154.7	5.35	5.50	1480.
240	6.56	33.80	238	26.56	152.2	5.51	5.86	1480.
250	6.45	33.83	248	26.59	148.6	5.66	6.24	1479.
260	6.41	33.84	258	26.61	147.5	5.80	6.62	1479.
270	6.31	33.85	268	26.63	145.6	5.95	7.02	1479.
280	6.22	33.87	278	26.65	143.1	6.10	7.43	1479.
290	6.11	33.88	288	26.68	141.1	6.24	7.84	1479.
300	6.00	33.89	298	26.70	139.1	6.38	8.26	1478.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 71

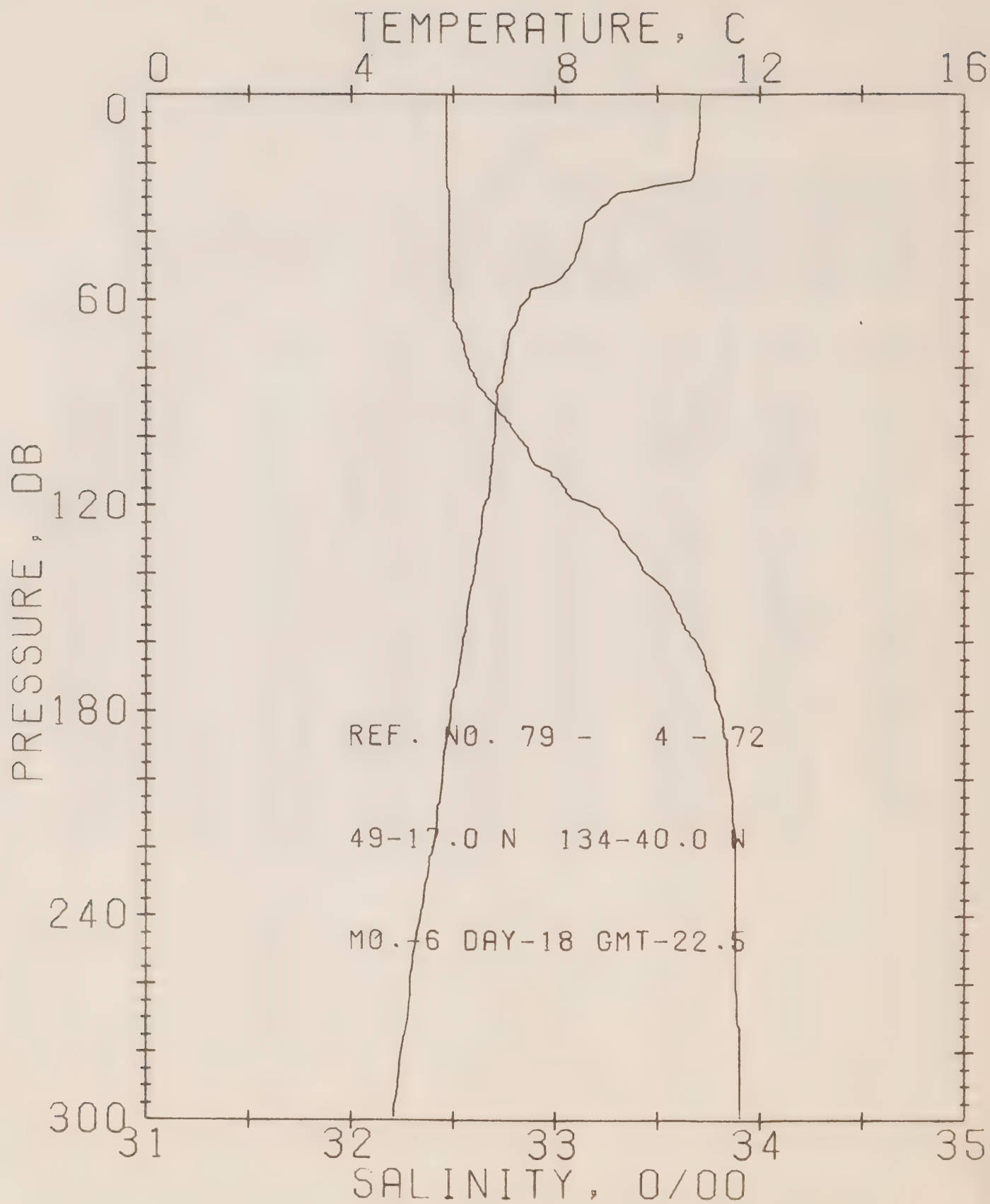
DATE 18/ 6/79

POSITION 49-26.0N, 136-40.0W GMT 17.4 STATION 9

RESULTS OF STP CAST 352 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.45	32.40	0	24.87	308.9	.00	.00	1489.
10	10.45	32.40	10	24.87	309.1	.31	.02	1489.
20	10.45	32.40	20	24.87	309.2	.62	.06	1489.
30	10.41	32.40	30	24.88	308.8	.93	.14	1489.
50	8.05	32.41	50	25.26	272.8	1.49	.37	1481.
75	7.45	32.45	75	25.38	262.0	2.16	.80	1479.
100	7.15	32.54	99	25.49	251.7	2.80	1.37	1478.
125	7.19	32.80	124	25.69	233.2	3.41	2.06	1479.
150	7.24	33.15	149	25.95	208.2	3.97	2.84	1480.
175	6.98	33.50	174	26.26	179.1	4.45	3.64	1480.
200	6.85	33.70	199	26.44	163.0	4.87	4.45	1480.
225	6.67	33.76	224	26.51	156.3	5.27	5.32	1480.
250	6.45	33.83	248	26.59	148.6	5.66	6.24	1479.
300	6.00	33.89	298	26.70	139.1	6.38	8.26	1478.
400	4.95	33.91	397	26.84	126.0	7.69	12.95	1476.
500	4.44	33.96	496	26.94	117.4	8.91	18.52	1475.
600	4.13	34.07	595	27.06	106.6	10.03	24.78	1476.
800	3.65	34.20	793	27.21	93.2	12.01	38.84	1477.
1000	3.21	34.29	991	27.32	83.0	13.77	54.95	1479.
1200	2.83	34.37	1188	27.42	74.1	15.33	72.47	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 72

DATE 18/ 6/79

POSITION 49-17.0N, 134-40.0W

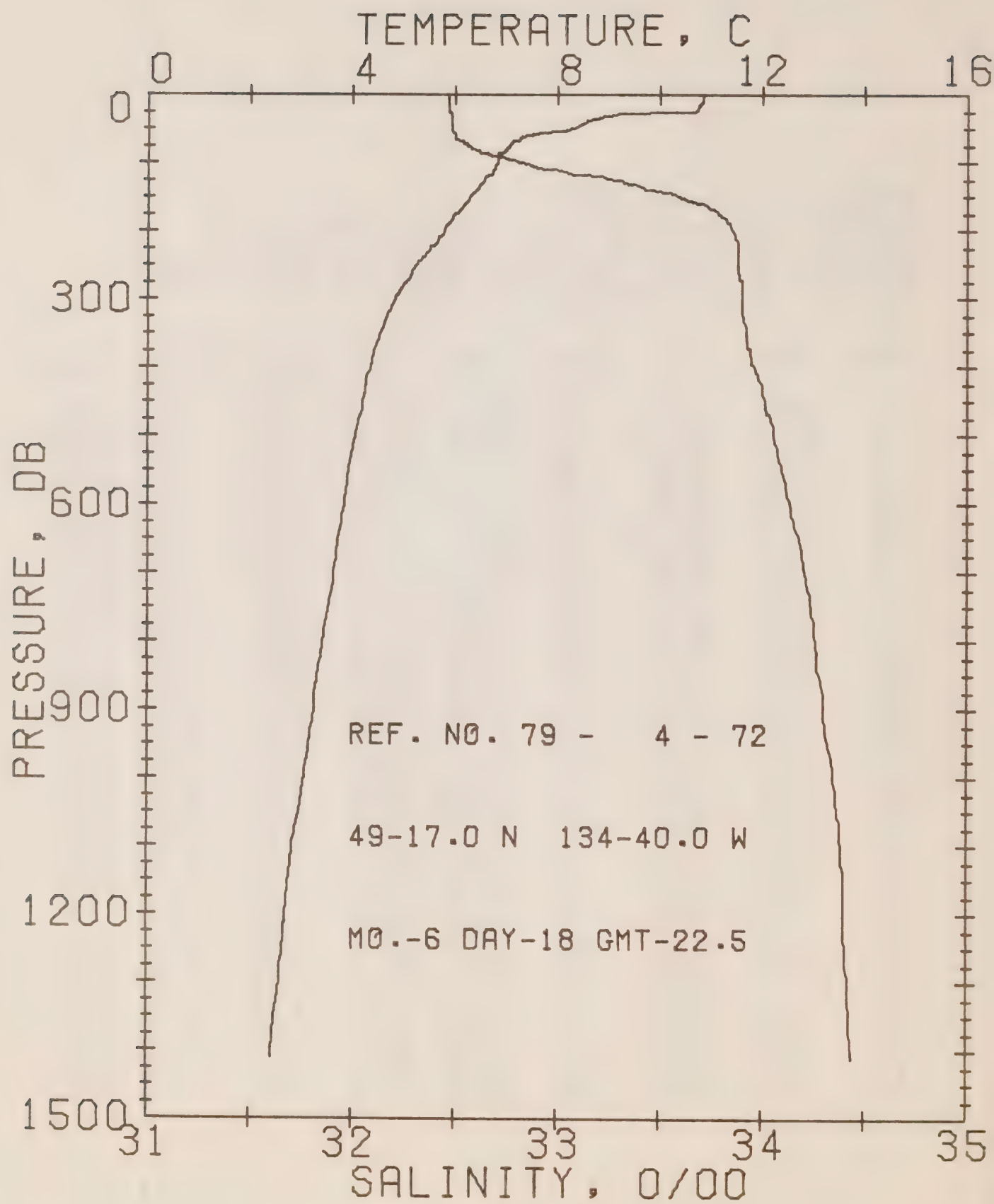
GMT 22.5

STATION 8

RESULTS OF STP CAST 192 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.85	32.47	0	24.86	310.3	.00	.00	1490.
10	10.83	32.47	10	24.86	310.0	.31	.02	1490.
20	10.73	32.47	20	24.88	308.7	.62	.06	1490.
30	9.15	32.48	30	25.15	283.1	.92	.14	1484.
40	8.54	32.48	40	25.24	274.4	1.20	.24	1482.
50	8.30	32.48	50	25.28	271.1	1.47	.36	1482.
60	7.44	32.50	60	25.42	257.9	1.74	.51	1478.
70	7.10	32.54	70	25.49	250.6	1.99	.68	1477.
80	6.99	32.58	80	25.54	246.3	2.24	.87	1477.
90	6.88	32.69	89	25.64	236.8	2.48	1.08	1477.
100	6.82	32.82	99	25.75	226.5	2.71	1.30	1477.
110	6.75	32.98	109	25.89	213.9	2.93	1.54	1477.
120	6.62	33.17	119	26.05	198.2	3.14	1.79	1477.
130	6.52	33.33	129	26.19	185.1	3.33	2.03	1477.
140	6.42	33.45	139	26.30	175.1	3.51	2.27	1477.
150	6.29	33.59	149	26.43	163.1	3.68	2.52	1477.
160	6.19	33.69	159	26.52	154.6	3.84	2.77	1477.
170	6.09	33.76	169	26.59	148.2	3.99	3.03	1477.
180	5.95	33.81	179	26.64	143.2	4.14	3.29	1476.
190	5.84	33.84	189	26.68	139.5	4.28	3.55	1476.
200	5.79	33.85	199	26.70	138.0	4.42	3.83	1476.
210	5.68	33.87	209	26.72	135.5	4.55	4.12	1476.
220	5.60	33.88	218	26.74	133.9	4.69	4.41	1476.
230	5.46	33.88	228	26.76	132.4	4.82	4.72	1475.
240	5.36	33.88	238	26.77	131.3	4.95	5.03	1475.
250	5.22	33.88	248	26.79	129.8	5.08	5.36	1474.
260	5.15	33.88	258	26.79	129.1	5.21	5.70	1474.
270	5.10	33.89	268	26.81	127.9	5.34	6.04	1474.
280	4.98	33.90	278	26.83	125.8	5.47	6.40	1474.
290	4.91	33.90	288	26.84	125.1	5.59	6.76	1474.
300	4.82	33.90	298	26.85	124.3	5.72	7.14	1474.



OFFSHORE OCEANOGRAPHY, GROUP

REFERENCE NO. 79- 4- 72

DATE 18/ 6/79

POSITION 49-17.0N, 134-40.0W

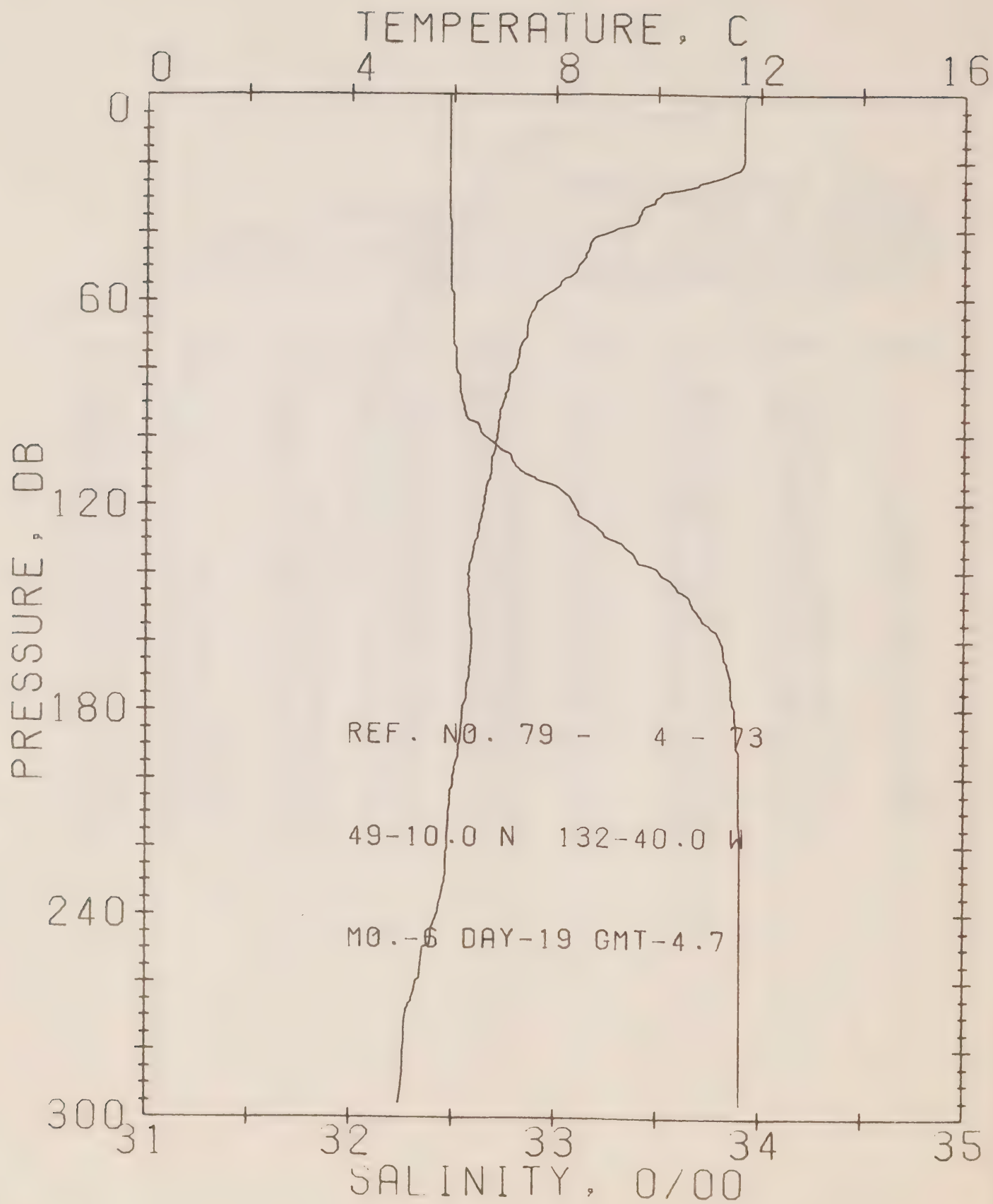
GMT 22.5

STATION 8

RESULTS OF STP CAST 342 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.85	32.47	0	24.86	310.3	.00	.00	1490.
10	10.83	32.47	10	24.86	310.0	.31	.02	1490.
20	10.73	32.47	20	24.88	308.7	.62	.06	1490.
30	9.15	32.48	30	25.15	283.1	.92	.14	1484.
50	8.30	32.48	50	25.28	271.1	1.47	.36	1482.
75	7.06	32.55	75	25.51	249.0	2.12	.77	1477.
100	6.82	32.82	99	25.75	226.5	2.71	1.30	1477.
125	6.56	33.28	124	26.15	189.3	3.24	1.91	1477.
150	6.29	33.59	149	26.43	163.1	3.68	2.52	1477.
175	6.00	33.78	174	26.61	145.7	4.06	3.16	1476.
200	5.79	33.85	199	26.70	138.0	4.42	3.83	1476.
225	5.51	33.88	223	26.75	132.9	4.75	4.56	1475.
250	5.22	33.88	248	26.79	129.8	5.08	5.36	1474.
300	4.82	33.90	298	26.85	124.3	5.72	7.14	1474.
400	4.35	33.96	397	26.95	115.3	6.92	11.41	1473.
500	4.05	34.05	496	27.05	106.3	8.02	16.47	1474.
600	3.83	34.13	595	27.14	98.7	9.05	22.20	1475.
800	3.42	34.26	793	27.28	86.4	10.89	35.29	1476.
1000	3.06	34.35	990	27.38	76.9	12.52	50.25	1478.
1200	2.70	34.40	1188	27.46	70.5	13.98	66.57	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 73

DATE 19/ 6/79

POSITION 49-10.0N, 132-40.0W

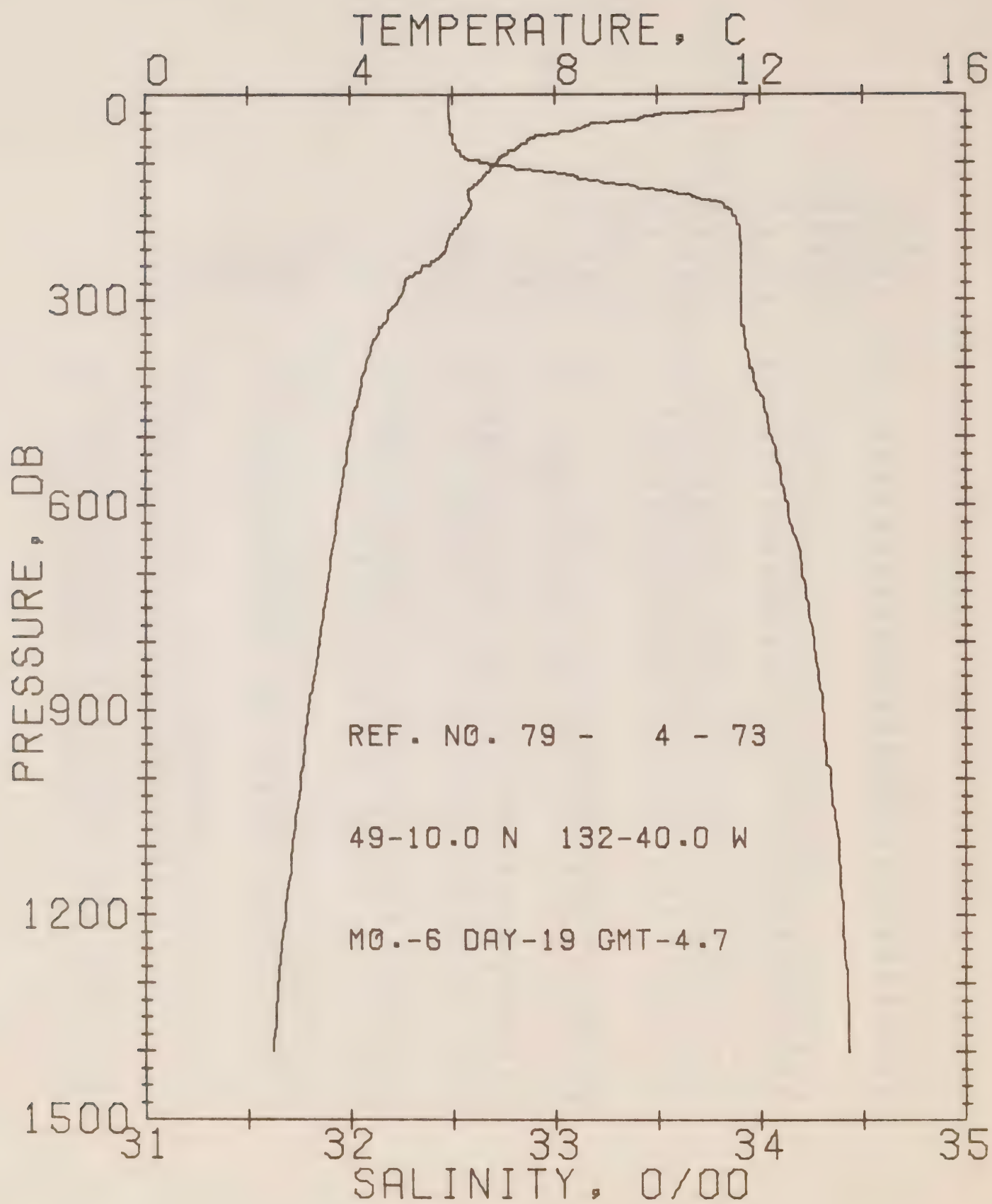
GMT 4.7

STATION 7

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.76	32.48	0	24.70	325.1	.00	.00	1493.
10	11.68	32.48	10	24.72	323.9	.32	.02	1493.
20	11.67	32.48	20	24.72	323.9	.65	.07	1493.
30	10.02	32.48	30	25.01	296.6	.96	.15	1488.
40	9.11	32.49	40	25.16	282.0	1.25	.25	1485.
50	8.45	32.49	50	25.26	272.5	1.53	.38	1482.
60	7.70	32.50	60	25.38	261.4	1.79	.53	1479.
70	7.44	32.50	70	25.42	258.1	2.05	.70	1479.
80	7.23	32.51	80	25.45	254.7	2.31	.89	1478.
90	6.98	32.55	89	25.51	249.0	2.56	1.11	1477.
100	6.86	32.65	99	25.61	239.7	2.81	1.35	1477.
110	6.74	32.83	109	25.77	224.9	3.04	1.59	1477.
120	6.61	33.09	119	25.99	204.0	3.25	1.84	1477.
130	6.47	33.27	129	26.15	189.0	3.45	2.10	1477.
140	6.31	33.51	139	26.36	169.2	3.63	2.34	1477.
150	6.32	33.67	149	26.48	157.5	3.79	2.58	1477.
160	6.37	33.81	159	26.59	147.7	3.94	2.82	1478.
170	6.32	33.86	169	26.63	143.9	4.09	3.07	1478.
180	6.20	33.88	179	26.67	140.7	4.23	3.32	1477.
190	6.14	33.89	189	26.68	139.4	4.37	3.58	1477.
200	6.00	33.90	199	26.71	137.1	4.51	3.86	1477.
210	5.93	33.90	209	26.72	136.3	4.64	4.14	1477.
220	5.90	33.91	219	26.73	135.3	4.78	4.44	1477.
230	5.84	33.91	228	26.73	134.7	4.91	4.75	1477.
240	5.70	33.91	238	26.75	133.1	5.05	5.07	1476.
250	5.42	33.91	248	26.79	129.9	5.18	5.40	1475.
260	5.29	33.91	258	26.80	128.5	5.31	5.74	1475.
270	5.09	33.91	268	26.82	126.2	5.44	6.08	1474.
280	5.05	33.91	278	26.83	126.0	5.56	6.44	1474.
290	5.02	33.91	288	26.83	125.7	5.69	6.80	1474.
300	4.94	33.91	298	26.84	124.8	5.81	7.18	1474.



OFFSHORE OCEANOGRAPH, GROUP

REFERENCE NO. 79- 4- 73

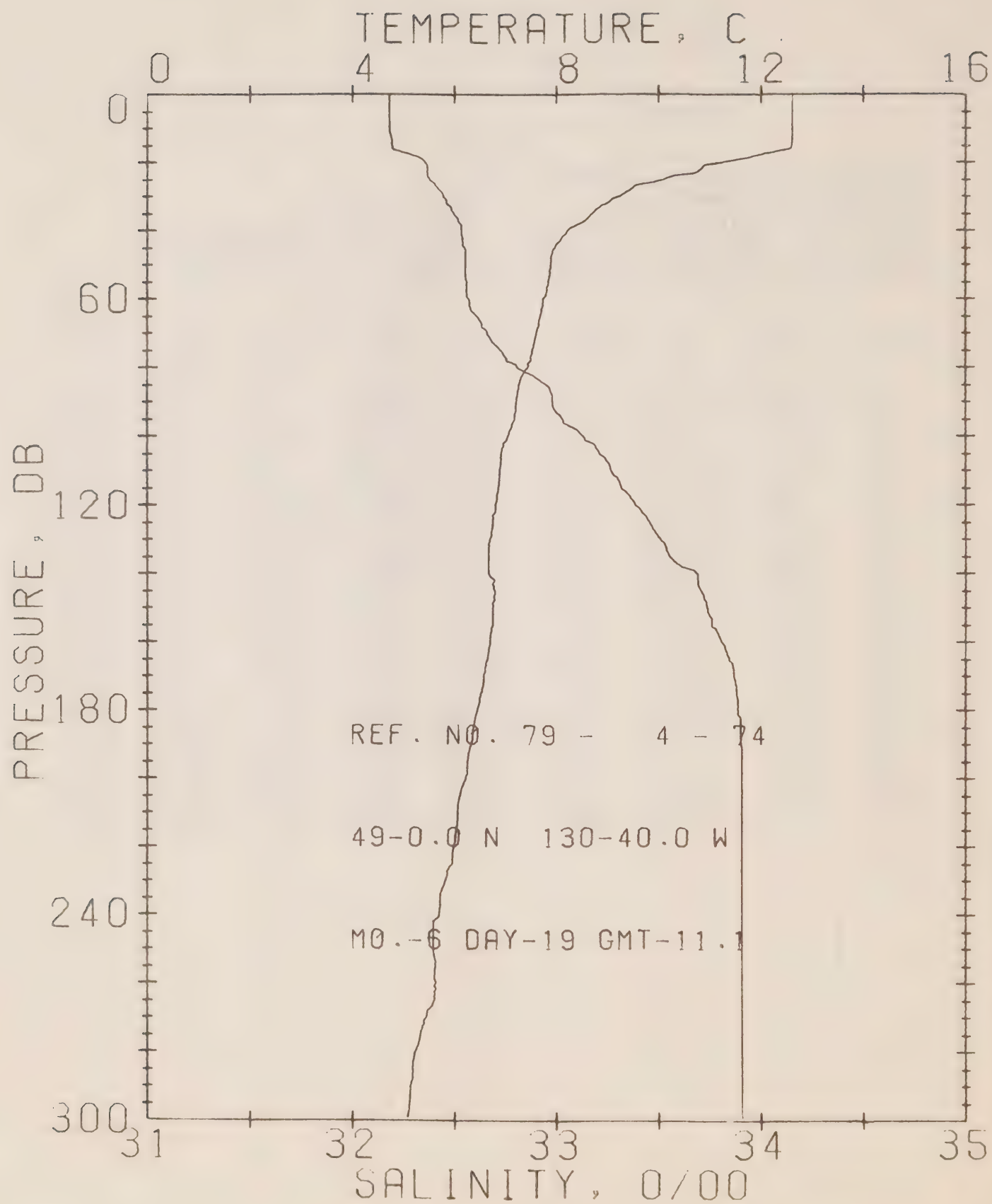
DATE 19/ 6/79

POSITION 49-10.0N, 132-40.0W GMT 4.7 STATION 7

RESULTS OF STP CAST 362 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.76	32.48	0	24.70	325.1	.00	.00	1493.
10	11.68	32.48	10	24.72	323.9	.32	.02	1493.
20	11.67	32.48	20	24.72	323.9	.65	.07	1493.
30	10.02	32.48	30	25.01	296.6	.96	.15	1488.
50	8.45	32.49	50	25.26	272.5	1.53	.38	1482.
75	7.27	32.51	75	25.45	255.1	2.18	.79	1478.
100	6.86	32.65	99	25.61	239.7	2.81	1.35	1477.
125	6.54	33.17	124	26.06	197.2	3.35	1.97	1477.
150	6.32	33.67	149	26.48	157.5	3.79	2.58	1477.
175	6.27	33.86	174	26.64	143.1	4.16	3.19	1478.
200	6.00	33.90	199	26.71	137.1	4.51	3.86	1477.
225	5.86	33.91	223	26.73	134.9	4.85	4.60	1477.
250	5.42	33.91	248	26.79	129.9	5.18	5.40	1475.
300	4.94	33.91	298	26.84	124.8	5.81	7.18	1474.
400	4.29	33.95	397	26.95	115.3	7.01	11.45	1473.
500	3.98	34.05	496	27.05	105.9	8.11	16.49	1474.
600	3.77	34.13	595	27.14	98.2	9.13	22.20	1475.
800	3.39	34.26	793	27.28	85.9	10.97	35.26	1476.
1000	3.02	34.34	991	27.38	77.3	12.60	50.16	1478.
1200	2.72	34.40	1188	27.45	70.7	14.07	66.63	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 74

DATE 19/ 6/79

POSITION 49- .0N, 130-40.0W

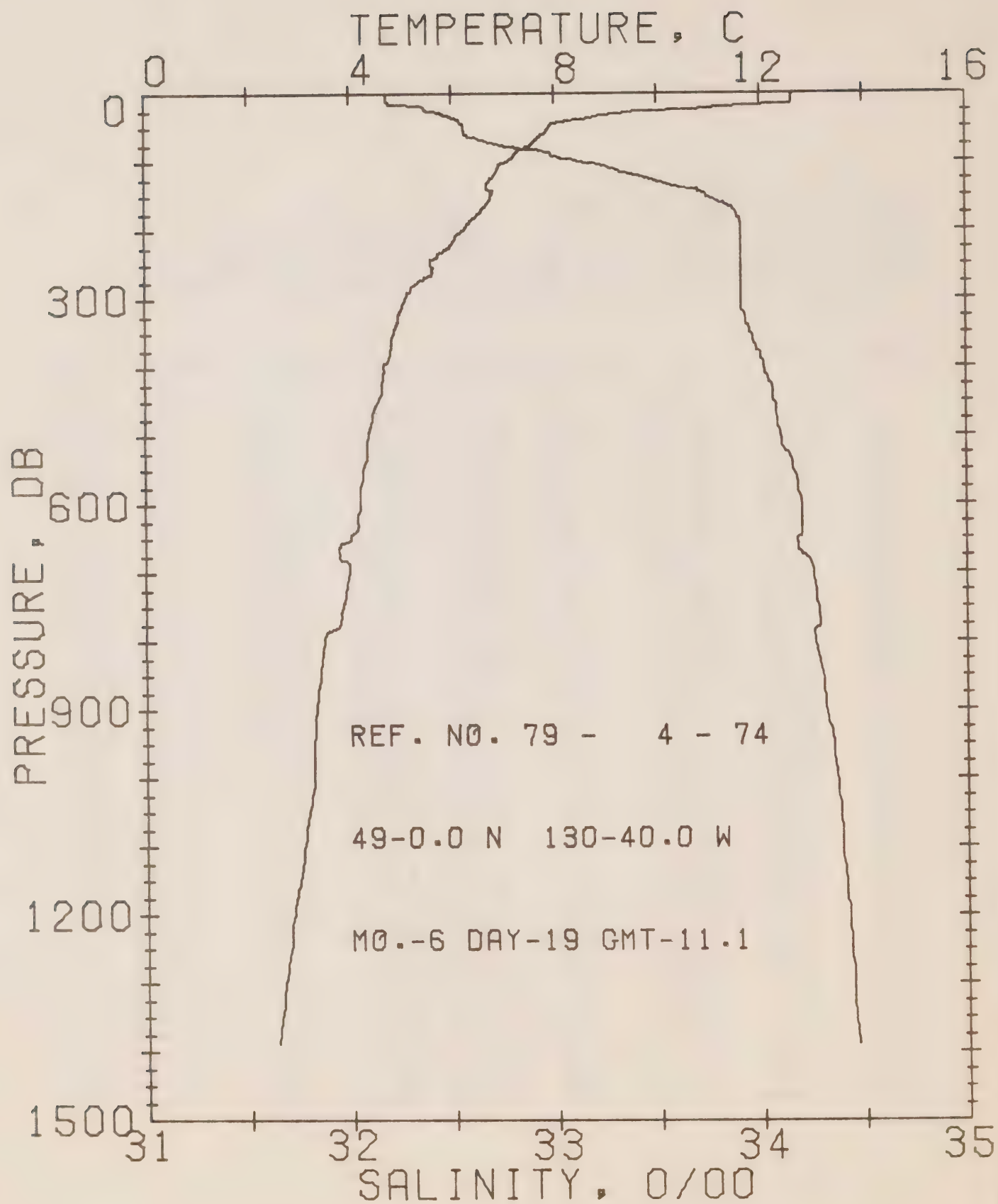
GMT 11.1

STATION 6

RESULTS OF STP CAST 202 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.63	32.18	0	24.31	362.7	.00	.00	1496.
10	12.60	32.18	10	24.31	362.4	.36	.02	1496.
20	11.26	32.36	20	24.70	325.7	.72	.07	1492.
30	9.24	32.45	30	25.11	286.7	1.02	.15	1485.
40	8.22	32.53	40	25.33	266.1	1.30	.25	1481.
50	7.89	32.55	50	25.39	260.2	1.56	.37	1480.
60	7.74	32.57	60	25.43	256.8	1.82	.51	1480.
70	7.60	32.66	70	25.52	248.3	2.07	.68	1479.
80	7.43	32.81	80	25.66	235.0	2.31	.87	1479.
90	7.22	32.98	89	25.82	219.7	2.54	1.06	1479.
100	7.03	33.13	99	25.97	206.2	2.75	1.27	1478.
110	6.89	33.27	109	26.10	194.1	2.95	1.48	1478.
120	6.81	33.39	119	26.20	184.2	3.14	1.70	1478.
130	6.69	33.51	129	26.31	173.9	3.32	1.93	1478.
140	6.68	33.69	139	26.45	160.5	3.49	2.16	1478.
150	6.76	33.74	149	26.48	158.0	3.65	2.40	1479.
160	6.69	33.81	159	26.55	152.0	3.80	2.64	1479.
170	6.57	33.87	169	26.61	146.1	3.95	2.89	1479.
180	6.44	33.89	179	26.64	143.1	4.10	3.15	1478.
190	6.32	33.90	189	26.67	140.6	4.24	3.42	1478.
200	6.21	33.91	199	26.69	138.9	4.38	3.70	1478.
210	6.05	33.91	209	26.71	137.1	4.51	3.98	1477.
220	5.97	33.91	218	26.72	136.2	4.65	4.28	1477.
230	5.81	33.91	228	26.74	134.4	4.79	4.59	1477.
240	5.69	33.91	238	26.75	133.0	4.92	4.91	1476.
250	5.57	33.91	248	26.77	131.8	5.05	5.24	1476.
260	5.63	33.91	258	26.76	132.5	5.18	5.59	1476.
270	5.44	33.91	268	26.78	130.4	5.32	5.94	1476.
280	5.22	33.91	278	26.81	127.9	5.45	6.30	1475.
290	5.13	33.91	288	26.82	127.0	5.57	6.67	1475.
300	5.08	33.91	298	26.83	126.5	5.70	7.06	1475.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 74

DATE 19/ 6/79

POSITION 49- .0N, 130-40.0W

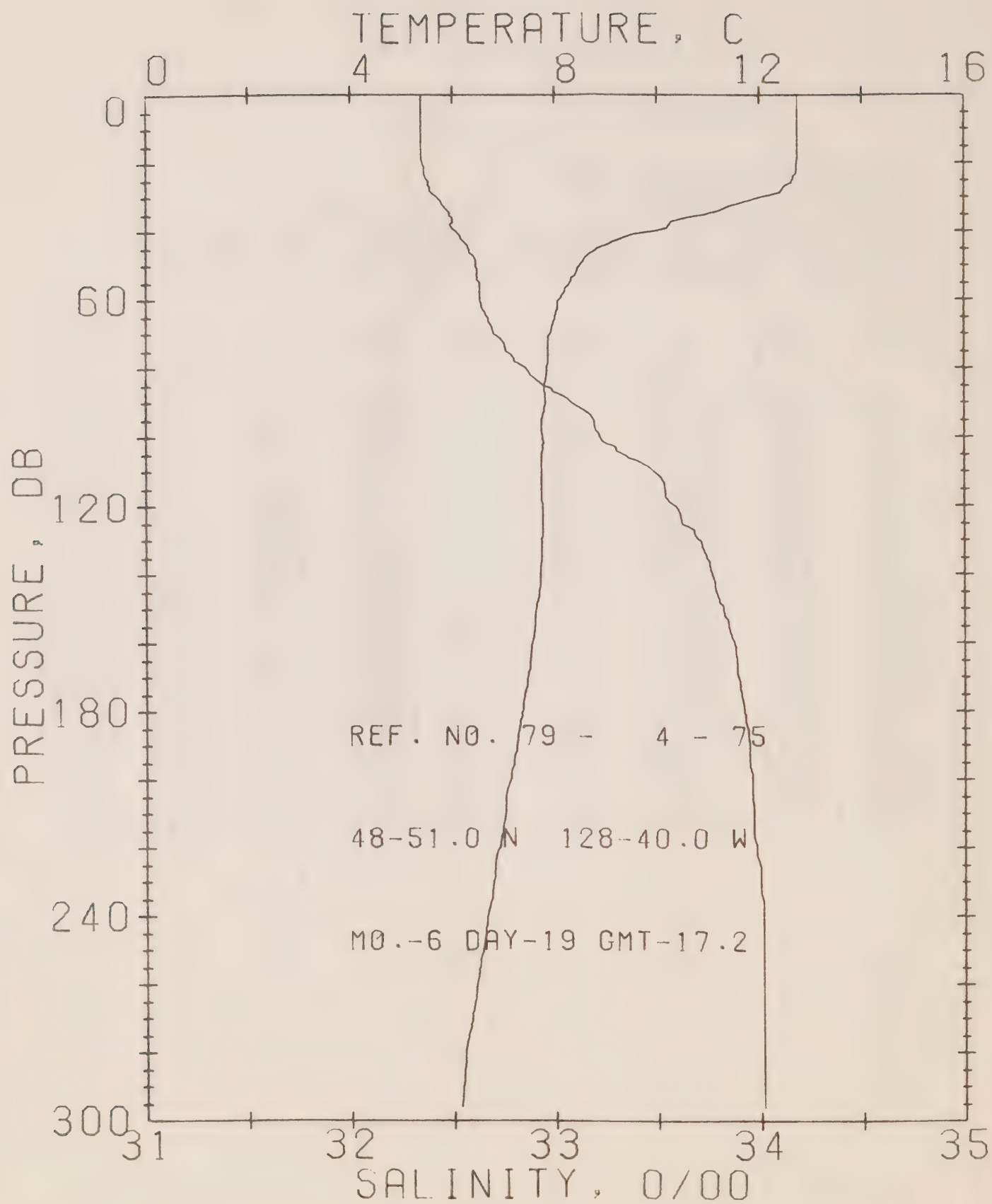
GMT 11.1

STATION 6

RESULTS OF STP CAST 426 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.63	32.18	0	24.31	362.7	.00	.00	1496.
10	12.60	32.18	10	24.31	362.4	.36	.02	1496.
20	11.26	32.36	20	24.70	325.7	.72	.07	1492.
30	9.24	32.45	30	25.11	286.7	1.02	.15	1485.
50	7.89	32.55	50	25.39	260.2	1.56	.37	1480.
75	7.52	32.73	75	25.59	242.1	2.19	.77	1479.
100	7.03	33.13	99	25.97	206.2	2.75	1.27	1478.
125	6.75	33.46	124	26.26	178.3	3.23	1.81	1478.
150	6.76	33.74	149	26.48	158.0	3.65	2.40	1479.
175	6.50	33.88	174	26.63	144.5	4.02	3.02	1478.
200	6.21	33.91	199	26.69	138.9	4.38	3.70	1478.
225	5.95	33.91	223	26.72	136.0	4.72	4.44	1477.
250	5.57	33.91	248	26.77	131.8	5.05	5.24	1476.
300	5.08	33.91	298	26.83	126.5	5.70	7.06	1475.
400	4.65	34.01	397	26.95	115.1	6.91	11.37	1475.
500	4.34	34.09	496	27.05	106.6	8.01	16.42	1475.
600	4.19	34.20	595	27.15	97.8	9.03	22.11	1476.
800	3.47	34.26	793	27.27	86.6	10.88	35.27	1477.
1000	3.24	34.36	991	27.38	77.8	12.51	50.22	1479.
1200	2.85	34.42	1188	27.46	70.6	14.00	66.87	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 75

DATE 19/ 6/79

POSITION 48-51.0N, 128-40.0W

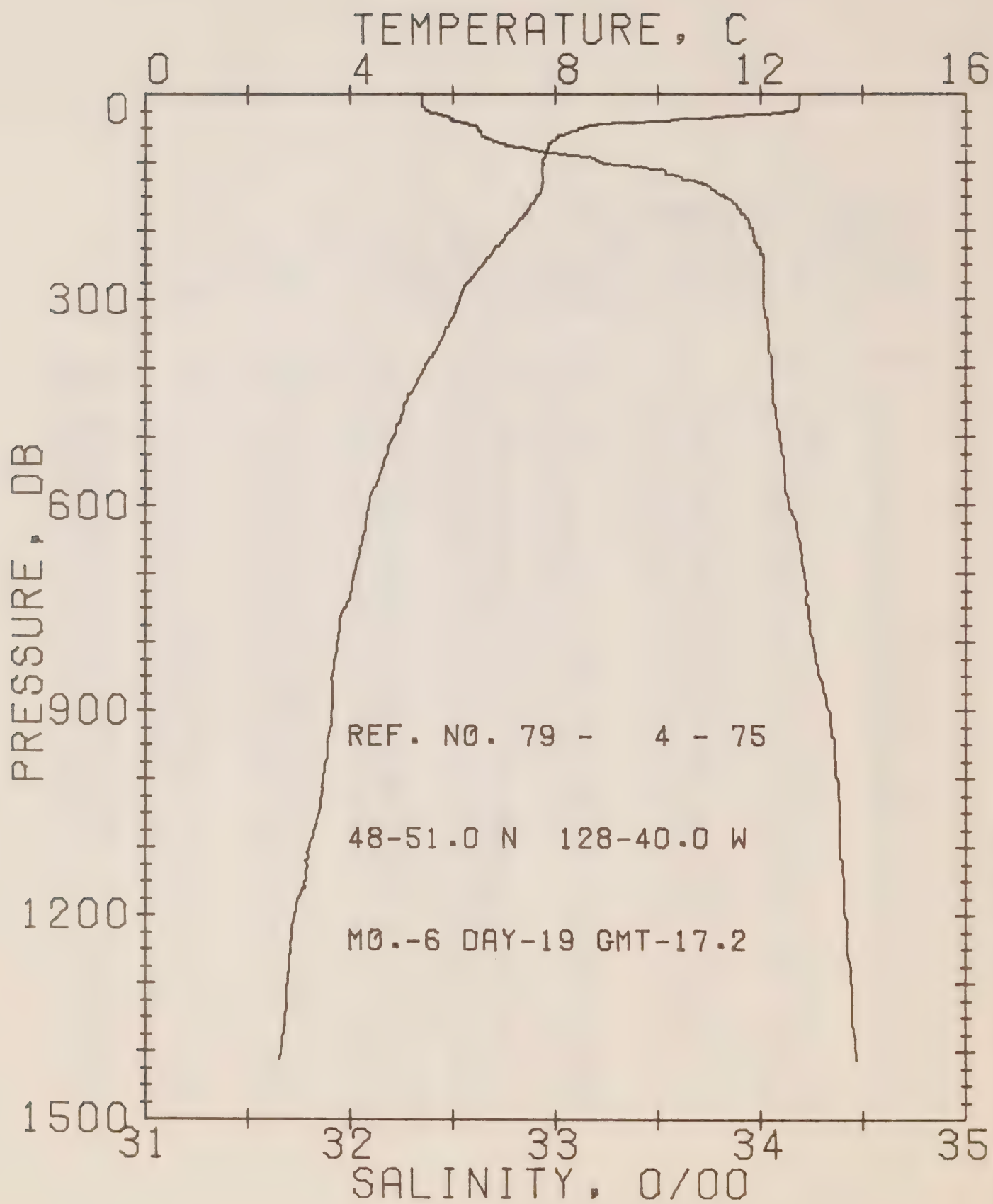
GMT 17.2

STATION 5

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.75	32.35	0	24.41	352.4	.00	.00	1497.
10	12.75	32.35	10	24.41	352.7	.35	.02	1497.
20	12.74	32.36	20	24.42	352.3	.71	.07	1497.
30	12.01	32.43	30	24.62	333.8	1.05	.16	1495.
40	9.92	32.52	40	25.05	292.2	1.36	.27	1488.
50	8.50	32.61	50	25.35	264.3	1.64	.40	1483.
60	8.10	32.63	60	25.42	257.3	1.90	.54	1481.
70	7.93	32.70	70	25.50	249.9	2.15	.71	1481.
80	7.84	32.86	80	25.64	236.9	2.40	.90	1481.
90	7.80	33.08	89	25.82	220.1	2.63	1.10	1481.
100	7.75	33.22	99	25.94	209.2	2.84	1.30	1481.
110	7.73	33.49	109	26.15	189.0	3.04	1.51	1482.
120	7.75	33.59	119	26.23	182.0	3.22	1.73	1482.
130	7.74	33.71	129	26.32	173.1	3.40	1.96	1482.
140	7.71	33.77	139	26.37	168.6	3.57	2.19	1482.
150	7.62	33.82	149	26.43	163.6	3.74	2.44	1482.
160	7.55	33.87	159	26.48	158.7	3.90	2.70	1482.
170	7.46	33.89	169	26.51	156.1	4.06	2.96	1482.
180	7.35	33.92	179	26.54	152.9	4.21	3.24	1482.
190	7.24	33.95	189	26.58	149.3	4.36	3.52	1482.
200	7.11	33.96	199	26.61	147.0	4.51	3.81	1481.
210	7.00	33.97	209	26.63	144.9	4.66	4.12	1481.
220	6.90	33.98	219	26.65	143.0	4.80	4.44	1481.
230	6.78	34.00	228	26.68	140.0	4.94	4.76	1481.
240	6.66	34.01	238	26.71	137.9	5.08	5.09	1480.
250	6.56	34.01	248	26.72	136.7	5.22	5.43	1480.
260	6.44	34.01	258	26.74	135.3	5.35	5.79	1480.
270	6.35	34.01	268	26.75	134.2	5.49	6.15	1480.
280	6.22	34.01	278	26.77	132.7	5.62	6.53	1479.
290	6.18	34.01	288	26.77	132.3	5.76	6.91	1479.
300	6.13	34.01	298	26.78	131.8	5.89	7.31	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 75

DATE 19/ 6/79

POSITION 48-51.0N, 128-40.0W

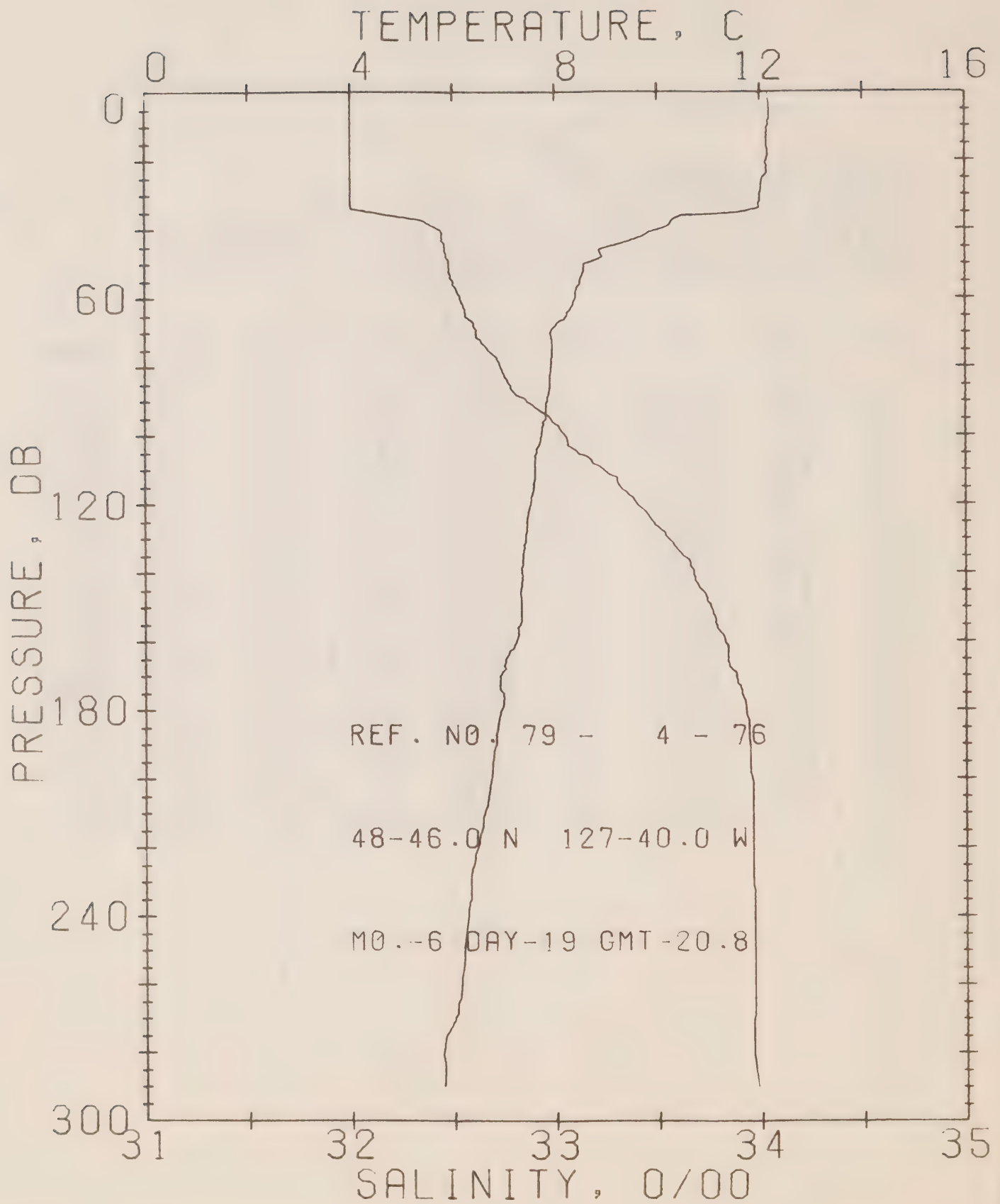
GMT 17.2

STATION 5

RESULTS OF STP CAST 433 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.75	32.35	0	24.41	352.4	.00	.00	1497.
10	12.75	32.35	10	24.41	352.7	.35	.02	1497.
20	12.74	32.36	20	24.42	352.3	.71	.07	1497.
30	12.01	32.43	30	24.62	333.8	1.05	.16	1495.
50	8.50	32.61	50	25.35	264.3	1.64	.40	1483.
75	7.87	32.76	75	25.56	244.6	2.28	.80	1481.
100	7.75	33.22	99	25.94	209.2	2.84	1.30	1481.
125	7.76	33.62	124	26.25	180.0	3.31	1.85	1482.
150	7.62	33.82	149	26.43	163.6	3.74	2.44	1482.
175	7.39	33.91	174	26.53	154.1	4.14	3.10	1482.
200	7.11	33.96	199	26.61	147.0	4.51	3.81	1481.
225	6.81	34.00	223	26.68	140.4	4.87	4.60	1481.
250	6.56	34.01	248	26.72	136.7	5.22	5.43	1480.
300	6.13	34.01	298	26.78	131.8	5.89	7.31	1479.
400	5.43	34.05	397	26.90	121.3	7.15	11.82	1478.
500	4.84	34.09	496	27.00	112.4	8.32	17.17	1477.
600	4.35	34.14	595	27.09	104.0	9.40	23.22	1477.
800	3.74	34.25	793	27.24	90.5	11.34	36.97	1478.
1000	3.48	34.37	991	27.36	79.9	13.02	52.43	1480.
1200	2.92	34.41	1188	27.44	72.2	14.54	69.45	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 76

DATE 19/ 6/79

POSITION 48-46.0N, 127-40.0W

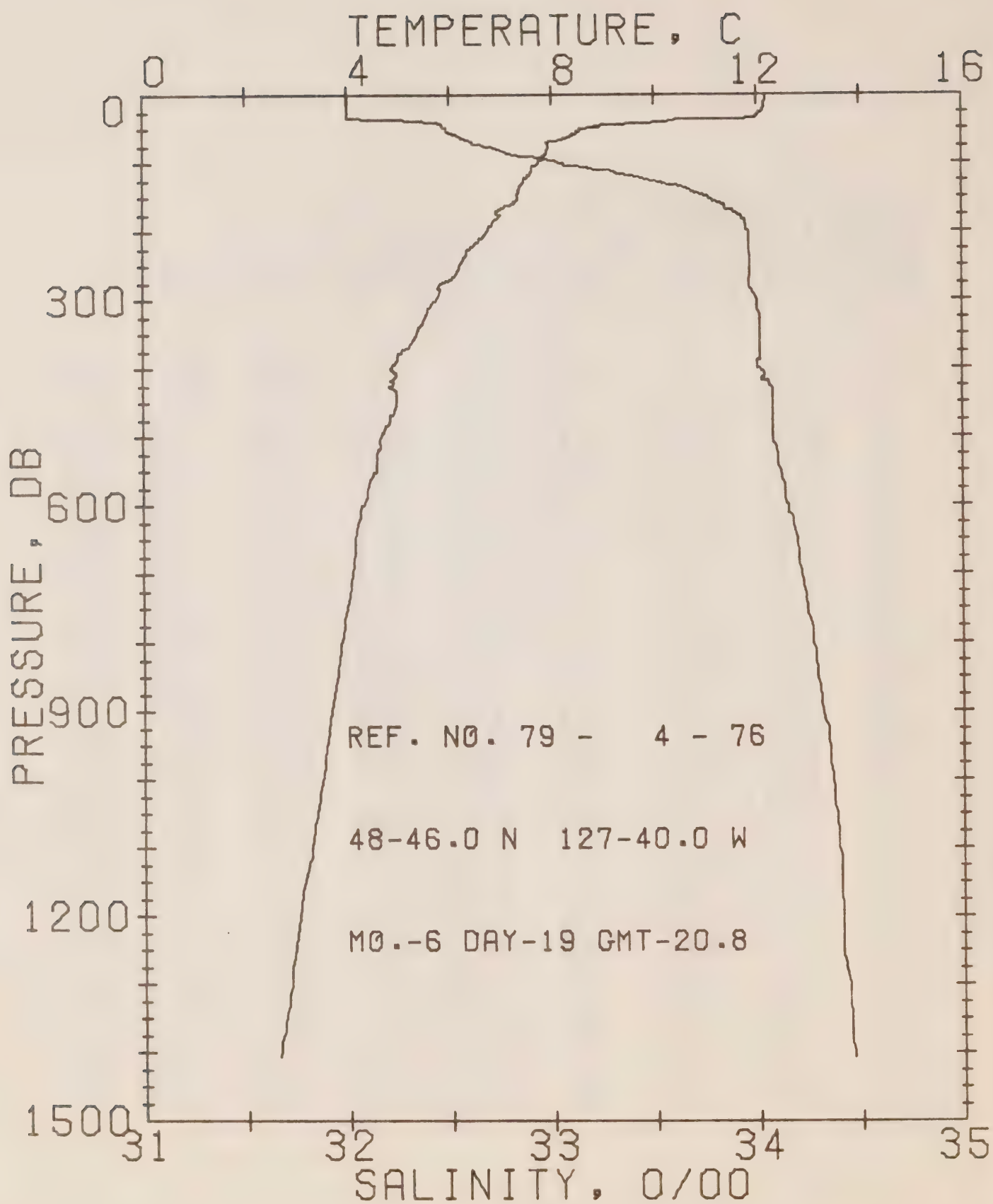
GMT 20.8

STATION 4

RESULTS OF STP CAST 208 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.17	32.00	0	24.25	367.7	.00	.00	1494.
10	12.16	32.00	10	24.26	367.7	.37	.02	1494.
20	12.14	32.00	20	24.26	367.6	.74	.07	1495.
30	12.01	32.00	30	24.28	365.5	1.10	.17	1494.
40	10.05	32.44	40	24.97	300.2	1.44	.29	1488.
50	8.55	32.48	50	25.24	274.7	1.73	.42	1483.
60	8.39	32.53	60	25.30	268.8	2.00	.57	1482.
70	7.89	32.61	70	25.44	256.0	2.26	.75	1481.
80	7.92	32.73	80	25.53	247.6	2.51	.94	1481.
90	7.83	32.86	90	25.64	236.9	2.76	1.15	1481.
100	7.72	33.05	99	25.81	221.4	2.99	1.37	1481.
110	7.60	33.24	109	25.97	205.8	3.20	1.60	1481.
120	7.51	33.40	119	26.11	192.8	3.40	1.83	1481.
130	7.42	33.55	129	26.25	180.2	3.59	2.07	1481.
140	7.34	33.67	139	26.35	170.7	3.76	2.31	1481.
150	7.33	33.76	149	26.42	164.1	3.93	2.56	1481.
160	7.23	33.83	159	26.49	157.7	4.09	2.81	1481.
170	6.92	33.88	169	26.57	149.9	4.24	3.07	1480.
180	6.94	33.93	179	26.61	146.6	4.39	3.34	1480.
190	6.82	33.95	189	26.64	143.7	4.54	3.61	1480.
200	6.73	33.96	199	26.66	142.1	4.68	3.89	1480.
210	6.59	33.96	209	26.68	140.2	4.82	4.19	1479.
220	6.46	33.96	219	26.70	138.6	4.96	4.49	1479.
230	6.32	33.96	228	26.71	137.1	5.10	4.81	1479.
240	6.27	33.97	238	26.73	135.8	5.23	5.14	1479.
250	6.20	33.97	248	26.74	135.0	5.37	5.47	1479.
260	6.13	33.97	258	26.75	134.3	5.50	5.82	1478.
270	6.01	33.96	268	26.75	133.6	5.64	6.19	1478.
280	5.78	33.96	278	26.78	130.8	5.77	6.56	1477.
290	5.79	33.98	288	26.80	129.6	5.90	6.93	1478.
300	5.74	34.00	298	26.82	127.9	6.03	7.32	1478.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 76

DATE 19/ 6/79

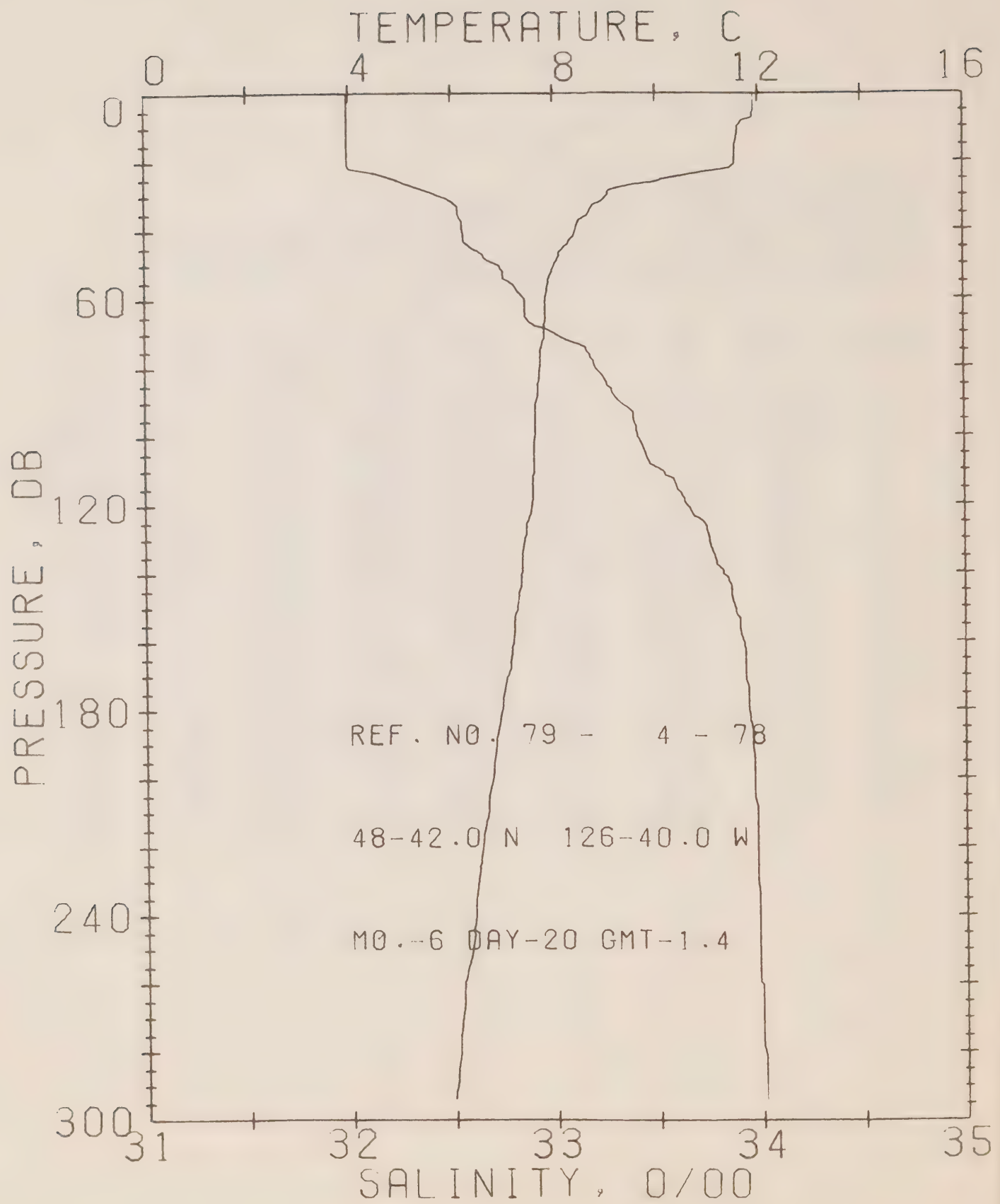
POSITION 48-46.0N, 127-40.0W GMT 20.8

STATION 4

RESULTS OF STP CAST 399 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

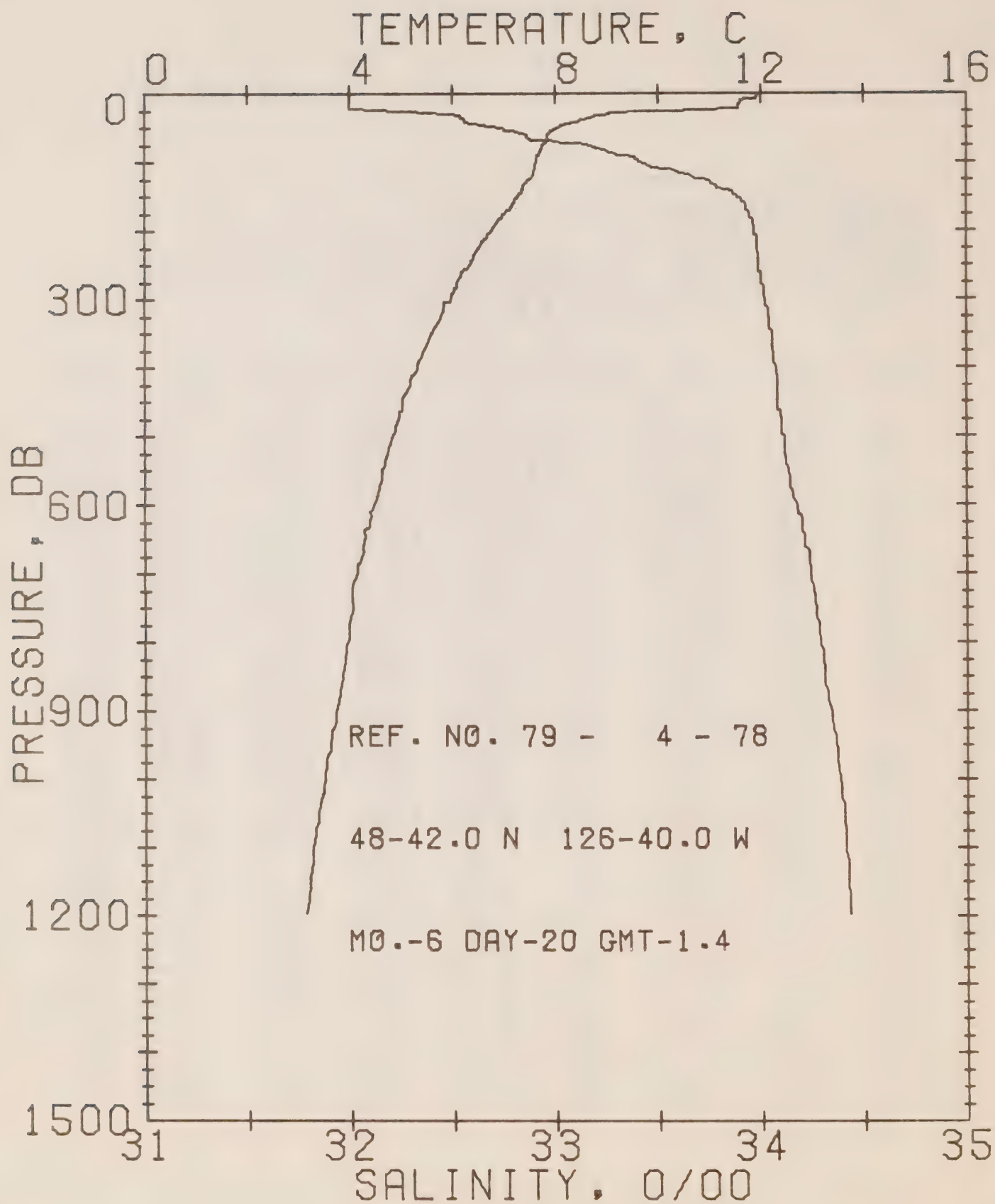
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.17	32.00	0	24.25	367.7	.00	.00	1494.
10	12.16	32.00	10	24.26	367.7	.37	.02	1494.
20	12.14	32.00	20	24.26	367.6	.74	.07	1495.
30	12.01	32.00	30	24.28	365.5	1.10	.17	1494.
50	8.55	32.48	50	25.24	274.7	1.73	.42	1483.
75	7.94	32.67	75	25.48	252.3	2.39	.84	1481.
100	7.72	33.05	99	25.81	221.4	2.99	1.37	1481.
125	7.45	33.48	124	26.18	186.1	3.49	1.95	1481.
150	7.33	33.76	149	26.42	164.1	3.93	2.56	1481.
175	6.98	33.91	174	26.59	148.6	4.32	3.20	1480.
200	6.73	33.96	199	26.66	142.1	4.68	3.89	1480.
225	6.37	33.96	223	26.71	137.6	5.03	4.65	1479.
250	6.20	33.97	248	26.74	135.0	5.37	5.47	1479.
300	5.74	34.00	298	26.82	127.9	6.03	7.32	1478.
400	4.84	34.00	397	26.93	117.8	7.25	11.68	1476.
500	4.63	34.07	496	27.00	111.4	8.40	16.92	1476.
600	4.29	34.15	595	27.10	102.7	9.47	22.94	1477.
800	3.86	34.27	793	27.24	90.4	11.39	36.62	1478.
1000	3.47	34.36	991	27.35	80.9	13.10	52.26	1480.
1200	3.01	34.41	1188	27.44	73.2	14.63	69.43	1482.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 78 DATE 20/ 6/79
 POSITION 48-42.0N, 126-40.0W GMT 1.4 STATION 3
 RESULTS OF STP CAST 189 POINTS TAKEN FROM ANALOG TRACE
 GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.91	31.99	0	24.30	363.8	.00	.00	1493.
10	11.61	31.99	10	24.35	358.8	.36	.02	1492.
20	11.54	31.99	20	24.36	357.9	.72	.07	1492.
30	9.06	32.45	30	25.14	284.0	1.04	.15	1484.
40	8.44	32.55	40	25.32	267.3	1.31	.25	1482.
50	8.03	32.73	50	25.51	248.7	1.58	.37	1481.
60	7.84	32.86	60	25.64	236.6	1.82	.51	1480.
70	7.82	33.00	70	25.75	226.0	2.05	.66	1481.
80	7.72	33.20	80	25.92	209.9	2.27	.83	1481.
90	7.65	33.32	89	26.03	200.2	2.47	1.00	1481.
100	7.62	33.41	99	26.10	193.3	2.67	1.19	1481.
110	7.60	33.53	109	26.20	184.2	2.86	1.40	1481.
120	7.55	33.64	119	26.30	175.2	3.04	1.61	1481.
130	7.42	33.75	129	26.40	165.7	3.21	1.82	1481.
140	7.35	33.82	139	26.46	159.7	3.37	2.05	1481.
150	7.25	33.88	149	26.52	154.1	3.53	2.28	1481.
160	7.18	33.92	159	26.57	150.3	3.68	2.52	1481.
170	7.07	33.93	169	26.59	148.2	3.83	2.77	1481.
180	6.94	33.94	179	26.62	145.5	3.97	3.03	1480.
190	6.83	33.96	189	26.65	143.1	4.12	3.30	1480.
200	6.75	33.97	199	26.66	141.5	4.26	3.58	1480.
210	6.66	33.98	209	26.68	139.7	4.40	3.88	1480.
220	6.55	33.98	218	26.70	138.3	4.54	4.18	1479.
230	6.45	33.98	228	26.71	137.2	4.68	4.50	1479.
240	6.39	33.99	238	26.73	135.9	4.81	4.82	1479.
250	6.34	33.99	248	26.73	135.3	4.95	5.16	1479.
260	6.15	34.00	258	26.77	132.3	5.08	5.51	1479.
270	6.12	34.00	268	26.77	132.1	5.22	5.87	1479.
280	6.08	34.01	278	26.78	131.1	5.35	6.24	1479.
290	6.01	34.01	288	26.79	130.2	5.48	6.62	1479.
300	5.97	34.02	298	26.80	129.2	5.61	7.01	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 78

DATE 20/ 6/79

POSITION 48-42.0N, 126-40.0W

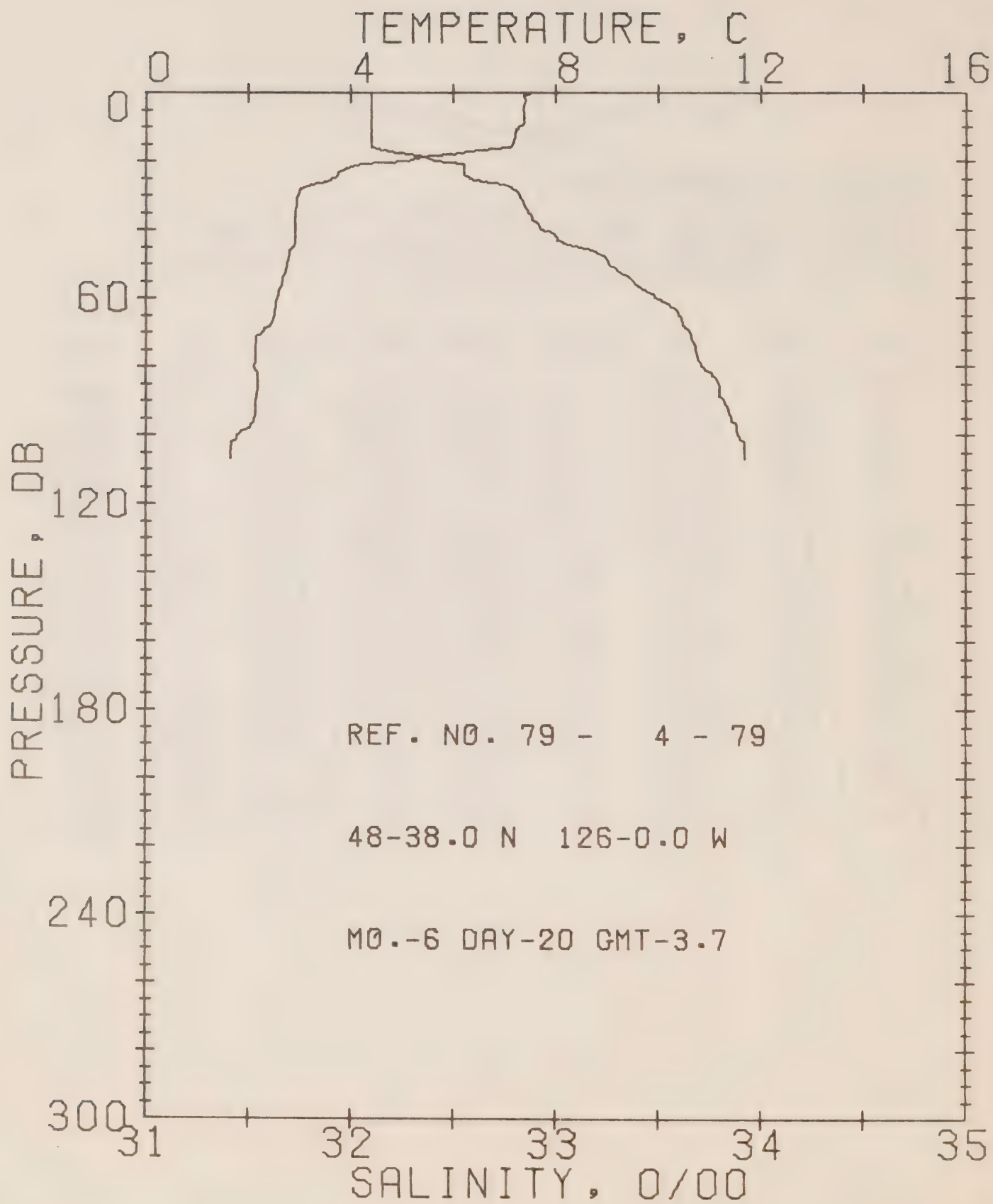
GMT 1.4

STATION 3

RESULTS OF STP CAST 345 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.91	31.99	0	24.30	363.8	.00	.00	1493.
10	11.61	31.99	10	24.35	358.8	.36	.02	1492.
20	11.54	31.99	20	24.36	357.9	.72	.07	1492.
30	9.06	32.45	30	25.14	284.0	1.04	.15	1484.
50	8.03	32.73	50	25.51	248.7	1.58	.37	1481.
75	7.74	33.16	75	25.89	213.1	2.16	.74	1481.
100	7.62	33.41	99	26.10	193.3	2.67	1.19	1481.
125	7.46	33.73	124	26.38	167.7	3.12	1.71	1481.
150	7.25	33.88	149	26.52	154.1	3.53	2.28	1481.
175	6.98	33.94	174	26.61	146.4	3.90	2.90	1480.
200	6.75	33.97	199	26.66	141.5	4.26	3.58	1480.
225	6.50	33.98	223	26.71	137.8	4.61	4.34	1479.
250	6.34	33.99	248	26.73	135.3	4.95	5.16	1479.
300	5.97	34.02	298	26.80	129.2	5.61	7.01	1479.
400	5.30	34.07	397	26.93	118.3	6.84	11.40	1478.
500	4.83	34.11	496	27.01	111.0	7.99	16.65	1477.
600	4.45	34.17	595	27.10	102.9	9.06	22.67	1477.
800	3.95	34.29	793	27.25	90.0	10.97	36.22	1479.
1000	3.50	34.38	991	27.37	79.6	12.66	51.72	1480.
1200	3.13	34.43	1188	27.44	73.1	14.19	68.78	1482.



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REFERENCE NO. 79- 4- 79

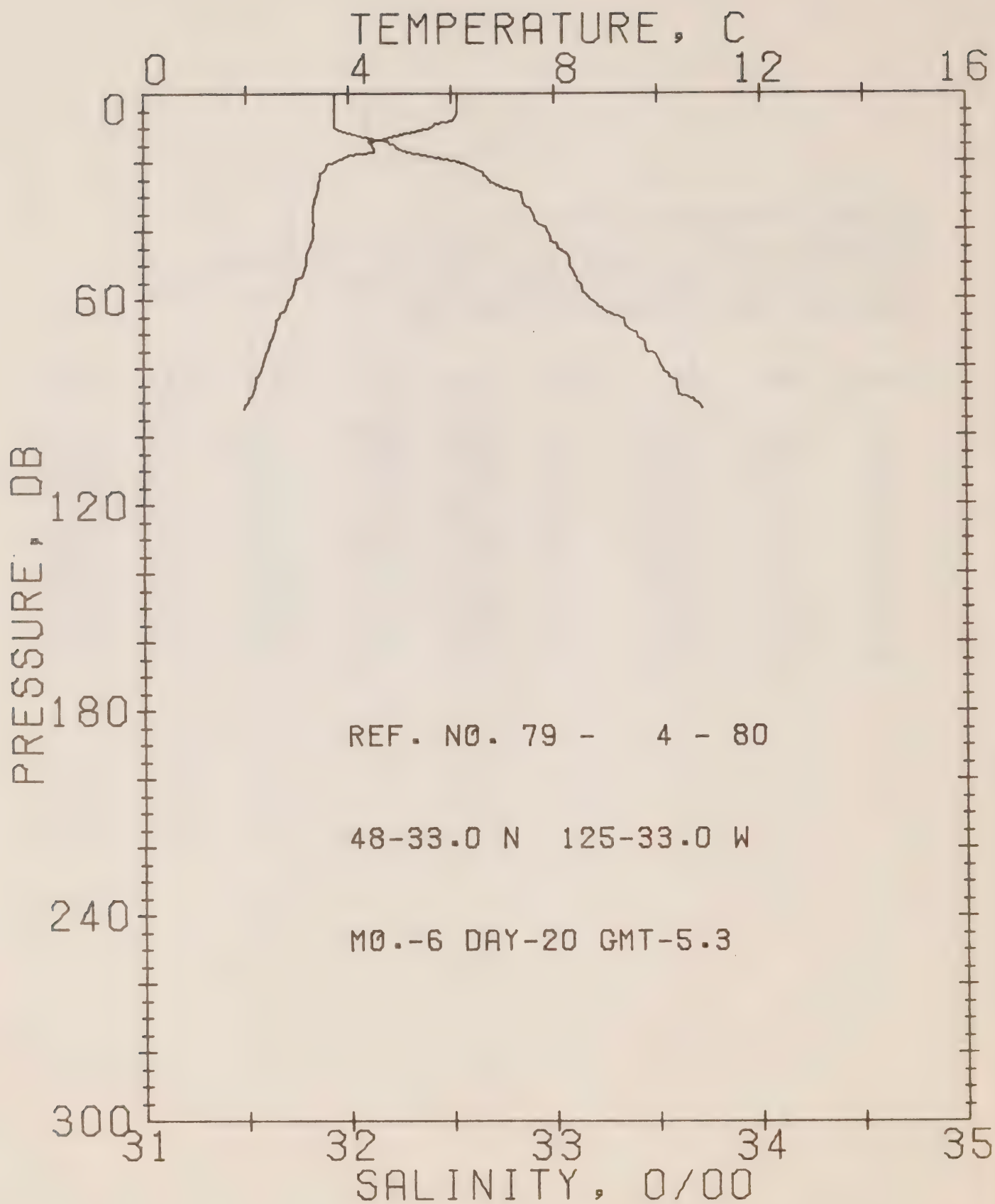
DATE 20/ 6/79

POSITION 48-38.0N, 126- .0W GMT 3.7 STATION 2

RESULTS OF STP CAST 88 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.49	32.10	0	25.10	287.6	.00	.00	1477.
10	7.28	32.10	10	25.12	285.0	.29	.01	1477.
20	5.10	32.41	20	25.64	236.1	.56	.06	1468.
30	2.96	32.82	30	26.17	185.1	.76	.11	1460.
40	2.91	32.93	40	26.27	176.4	.94	.17	1460.
50	2.76	33.26	50	26.54	150.3	1.11	.25	1460.
60	2.55	33.49	60	26.74	131.3	1.25	.33	1460.
70	2.26	33.65	70	26.89	117.0	1.37	.41	1459.
80	2.10	33.71	79	26.95	111.3	1.48	.49	1458.
90	2.13	33.82	89	27.04	103.2	1.59	.59	1459.
100	1.80	33.89	99	27.12	95.5	1.69	.68	1457.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 4- 80

DATE 20/ 6/79

POSITION 48-33.0N, 125-33.0W GMT 5.3 STATION 1

RESULTS OF STP CAST 85 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.10	31.93	0	25.14	283.1	.00	.00	1471.
10	5.59	31.93	10	25.20	277.4	.28	.01	1470.
20	3.73	32.53	20	25.87	213.6	.53	.05	1463.
30	3.35	32.84	30	26.16	186.9	.73	.10	1462.
40	3.30	32.97	40	26.26	176.7	.91	.17	1462.
50	3.16	33.07	50	26.36	168.0	1.08	.25	1461.
60	2.84	33.17	60	26.46	157.8	1.25	.34	1460.
70	2.52	33.40	70	26.67	137.9	1.39	.43	1459.
80	2.30	33.52	79	26.79	127.1	1.53	.54	1459.
90	2.03	33.68	89	26.94	113.0	1.65	.64	1458.

Surface Salinity and Temperature Observations

(P-79-4)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 79- 4

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
79	5	4	1859	32.008		123-38
79	5	4	2005	31.858		124- 0
79	5	4	2115	32.087		124-30
79	5	4	2215	31.370		125- 0
79	5	5	10	31.644	10.1	125-33
79	5	5	147	31.921	10.5	126- 0
79	5	5	347	32.182	9.8	126-40
79	5	5	745	32.212		127-40
79	5	5	1010	32.481		128-40
79	5	5	1245	32.519		129-40
79	5	5	1545	32.317	9.6	130-40
79	5	5	2120	32.493		131-40
79	5	6	0	32.477	8.8	132-40
79	5	6	331	32.602		133-40
79	5	6	615	32.474		134-40
79	5	6	1430	32.576		137-40
79	5	6	1720	32.532		138-40
79	5	6	2035	32.556	7.9	139-40
79	5	6	2340	32.573	8.1	140-40
79	5	7	305	32.543	8.0	141-40
79	5	7	640	32.599	7.5	142-40
79	5	7	1715	32.652	7.7	145- 0
79	5	8	145	32.659	8.0	ON STATION
79	5	9	0		7.8	ON STATION
79	5	10	0		7.2	ON STATION
79	5	11	0	32.639	7.1	ON STATION
79	5	12	0	32.651	7.6	ON STATION
79	5	13	0	32.658	7.7	ON STATION
79	5	14	1700	32.702*	7.3	ON STATION
79	5	15	1730	32.649*	7.4	ON STATION
79	5	16	0	32.673	7.8	ON STATION
79	5	17	0	32.663	7.8	ON STATION
79	5	18	0	32.623	7.8	ON STATION
79	5	19	0		7.8	ON STATION
79	5	20	0	32.614*	8.1	ON STATION
79	5	21	0	32.645	8.0	ON STATION
79	5	22	1918	32.650		ON STATION
79	5	23	0	32.662	8.1	ON STATION
79	5	24	0	32.653	8.1	ON STATION
79	5	25	0	32.648	8.5	ON STATION
79	5	26	0		8.4	ON STATION
79	5	27	0	32.650	8.3	ON STATION
79	5	28	0	32.604	8.3	ON STATION
79	5	29	1851	32.605	8.2	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 79- 4

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
79	5	30	0	32.645	8.9	ON STATION
79	5	31	0	32.598	8.5	ON STATION
79	6	1	0	32.590	8.6	ON STATION
79	6	2	0	32.590	8.3	ON STATION
79	6	3	0	32.590	8.4	ON STATION
79	6	4	1830	32.592	8.3	ON STATION
79	6	5	0	32.593	8.4	ON STATION
79	6	6	0		8.5	ON STATION
79	6	7	0	32.595	8.8	ON STATION
79	6	8	0	32.585	8.8	ON STATION
79	6	9	0	32.594	8.9	ON STATION
79	6	10	0	32.594	8.7	ON STATION
79	6	11	1906	32.610		ON STATION
79	6	12	0	32.625	9.0	ON STATION
79	6	13	0	32.589	8.9	ON STATION
79	6	14	0	32.586	9.0	ON STATION
79	6	15	0	32.592	9.1	ON STATION
79	6	16	0	32.584	9.0	ON STATION
79	6	17	0		9.2	ON STATION
79	6	17	840	32.574		143-40
79	6	17	1800	32.578	9.4	142-40
79	6	18	152	32.533		141-40
79	6	18	430	32.522	9.7	140-40
79	6	18	1020	32.522	10.1	138-40
79	6	18	1335	32.549		137-40
79	6	18	1625	32.410	10.5	136-40
79	6	18	1940	32.518		135-40
79	6	18	2230	32.463	10.8	134-40
79	6	19	140	32.451		133-40
79	6	19	430	32.441	11.7	132-40
79	6	19	805	32.264		131-40
79	6	19	1100	32.185	12.6	130-40
79	6	19	1430	32.363		129-40
79	6	19	1710	32.316	12.8	128-40
79	6	19	2050	31.975	12.2	127-40
79	6	20	130	31.973	11.9	126-40
79	6	20	340	32.057		126- 0
79	6	20	515	31.810	11.0	125-33
79	6	20	717	32.106		125- 0
79	6	20	905	32.017		124-30
79	6	20	1135	31.768		124- 0

* DENOTES SALINITY SAMPLE TAKEN FROM A
BUCKET. ALL OTHER SAMPLES TAKEN FROM
THE SEAWATER LOOP

CAI
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-81R15-

**OCEANOGRAPHIC OBSERVATIONS
AT OCEAN STATION P
15 June - 2 August 1979
VOLUME 101**



**INSTITUTE OF OCEAN SCIENCES
Sidney, B.C.**



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OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P

15 June - 2 August 1979

VOLUME 101

Institute of Ocean Sciences

Sidney, B.C.

1981

ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weather ship at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including surface observations and profiles obtained with bottle casts and conductivity-temperature-pressure instruments.

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INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude $50^{\circ}00'N$, Longitude $145^{\circ}00'W$) was inaugurated in December 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959 by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at $40'$, i.e. $139^{\circ}40'W$, $141^{\circ}40'W$, etc. These stations are known as Line P BT stations. Data observed prior to 1968 have been indexed by Collins et al (1969).

The present record includes STD and surface salinity and temperature data collected from the CCGS Vancouver during the period 15 June to 2 August 1979.

All physical oceanographic data have been stored by the Marine Environmental Data Services Branch (MEDS), Department of Fisheries and Oceans, 240 Sparks Street, 7th Floor West, Ottawa, Ontario, Canada, K1A 0E6. Requests for these data should be directed to MEDS.

Biological and productivity data are published in the Manuscript Report series of the Department of Fisheries and Oceans (DFO), Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to DFO.

Marine geochemical data are for the Ocean Chemistry Division, Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, B. C., Canada, V8L 4B2.

PROGRAM OF OBSERVATION FROM CCGS VANCOUVER, 15 June - 2 August 1979 (P-79-5)
(MEDS Ref. No. 15-79-005)

Oceanographic observations were made by the officers and crew of the CCGS Vancouver.

En Route to Station P (Line P)

STD profiles were taken at Line P stations 1 to 12.

Surface salinity and nutrient samples were taken from the seawater loop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawater loop) were run continuously.

Mechanical BT's or XBT's were taken at all BT positions.

On Station P

The oceanographic program was carried out as follows:

Physical Oceanography

- 1) Forty-two STD profiles were taken at Station P.
Fourteen STD profiles were taken at MILE GRID positions.
- 2) Daily salinity samples were taken from the seawater loop at 0000 hours GMT.
- 3) BT's or XBT's were taken every three hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format. XBT's were taken on days of rough weather.

Marine Geochemistry

Samples for air CO_2 , PCO_2 , POC, alkalinity, nutrients and tritium obtained during this cruise are for the Ocean Chemistry Division and are not included in this data report.

Biological Oceanography

Samples from 150 metre vertical plankton hauls (Station P) and nutrients (Line P) obtained during this cruise are for the Pacific Biological Station and are not included in this data report.

En Route from Station P (Line P)

Surface salinity and nutrient samples were taken from the seawater loop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawater loop) were run continuously.

Mechanical BT's or XBT's were taken at all BT positions.

Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. M. Bigg, Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiget, Curator of Birds and Mammals, Provincial Museum, Department of Provincial Secretary and Travel Industry, Victoria, British Columbia, Canada.

OBSERVATIONAL PROCEDURES

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of $\pm 0.1^{\circ}\text{C}$ accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a '*' in this data record.

Salinity determinations were made ashore with a Guildline Autosol salinometer. Accuracy using duplicated determinations is estimated to be $\pm 0.003^{\circ}/\text{oo}$.

Line P engine intake continuous temperature on both ships was recorded by a Honeywell Electronik 15 Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be $\pm 0.1^{\circ}\text{C}$.

Each ship is equipped with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be $\pm 0.1^{\circ}\text{C}$ for temperature and $\pm 0.1^{\circ}/\text{oo}$ for salinity.

STD profiles were taken with a Guildline Model 8700 STD system.

COMPUTATIONS

Analog traces from the salinity-temperature-pressure instrument have been digitized using a Hewlett-Packard (HP) 9821A calculator and an HP 9864A digitizer, then replotted by an HP 9862A plotter. Digitization was continued until original and computer plotted traces were coincident.

The HP 9821A was then connected to an HP 2116 minicomputer and the digitized data transferred to 9-track tape. Using a UNIVAC 1106 computer the data was listed and obvious spikes removed.

Generally a correction is applied, determined by comparison with hydrographic casts of the same cruise. As no hydrographic casts were taken, the STD data were compared with hydrographic casts from the previous and following cruises.

The differences were very irregular, therefore because of difficulty in calibrating no correction has been applied.

Temperature and salinity values were listed at standard pressures and plotted using a Houston Complot DP8S.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from magnetic tape records.

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)
DEPTH	is reported in metres
SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)
SVA (THETA)	is potential specific volume anomaly
DELTA D	is geopotential anomaly (J/kg)
POT EN	is potential energy in units of 10^8 ergs/cm ²
SOUND	is the velocity of sound in metres per second

Data were processed for publication by Messrs. C. de Jong, B. Minkley and J. Linguanti.

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- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. *Fish. Res. Bd. Can. Tech. Rept. No.* 106.

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- U.S.N. Hydrographic Office, 1955. Instruction Manual of Oceanographic Observations. Publ. No. 607.

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast (m)	Comments
001	1	16/06/79	0100	100		} Line P
002	2	16/06/79	0240	105		
003	3	16/06/79	0448	1200		
004	4	16/06/79	0815	1400		
005	5	16/06/79	1125	1400		
006	6	16/06/79	1755	1400		
007	7	17/06/79	0000	1400		
008	8	17/06/79	0635	1400		
009	9	17/06/79	1320	1400		
010	10	17/06/79	2035	1400		
011	11	18/06/79	0345	1400		
012	12	18/06/79	1115	1400		
013	P	18/06/79	1930	1400		} MILE grid
014	P	19/06/79	1530	1400		
015	P	19/06/79	1555	300		
016	E3	19/06/79	1800	300		
017	E4	19/06/79	1930	300		
018	C1	19/06/79	2100	300		
019	W4	19/06/79	2230	300		
020	W3	20/06/79	0015	300		
021	P	20/06/79	1710	1400		
022	P	21/06/79	1710	1400		
023	P	22/06/79	1815	1400		
024	P	23/06/79	1800	1400		} MILE grid
025	P	24/06/79	1730	1400		
026	P	25/06/79	1725	1400		
027	P	26/06/79	1735	1400		
028	P	27/06/79	1745	1400		
029	P	28/06/79	1715	1400		
030	P	29/06/79	1730	1400		
031	P	30/06/79	1715	1400		
032	P	01/07/79	1720	1400		
033	P	02/07/79	1725	1400		
034	P	03/07/79	1710	1400		
035	P	04/07/79	1725	1400		
036	P	05/07/79	1725	1400		
037	P	06/07/79	1725	1400		
038	P	07/07/79	1725	1400		
039	P	08/07/79	1730	1400		
040	P	08/07/79	1750	300		
041	E3	08/07/79	1930	300		
042	E4	08/07/79	2110	300		
043	C1	08/07/79	2310	300		
044	W4	09/07/79	0100	300		
045	P	09/07/79	1730	1400		
046	P	10/07/79	1730	1400		
047	P	11/07/79	1730	1400		
048	P	12/07/79	1730	1400		
049	P	13/07/79	1730	1400		
050	P	14/07/79	1730	1400		
051	P	15/07/79	1730	1400		

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS (continued)

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast (m)	Comments
052	P	16/07/79	1730	1400		
053	P	17/07/79	1850	1400		
054	P	18/07/79	1730	1400		
055	P	19/07/79	1730	1400		
056	P	20/07/79	1715	1400		
057	P	21/07/79	1730	1400		
058	P	22/07/79	1815	1400		
059	P	23/07/79	1740	1400		
060	P	23/07/79	1800	300		} MILE grid
061	E3	23/07/79	1930	300		
062	E4	23/07/79	2110	300		
063	C1	23/07/79	2315	300		
064	W4	24/07/79	0015	300		
065	W3	24/07/79	0230	300		
066	P	24/07/79	1730	1400		
067	P	25/07/79	1730	1400		
068	P	26/07/79	1730	1400		
069	P	27/07/79	1730	1400		
070	P	28/07/79	1730	1260		
071	P	29/07/79	1700	1400		

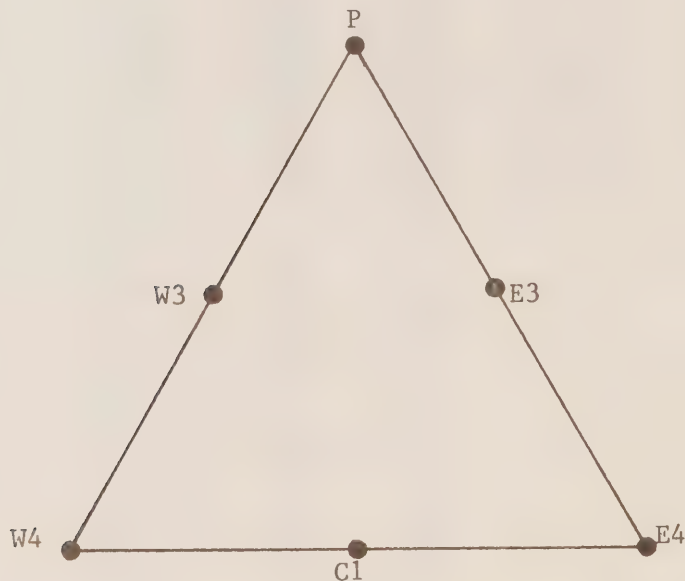
MILE GRID

(MIXED LAYER EXPERIMENT)

During the MILE experiment in the summer of 1977 a 20-mile triangular grid was initiated with STD stations to 300 metres.

During this cruise the grid survey was completed three times.

1st - STD consec. #015 - #020
 2nd - STD consec. #040 - #045
 3rd - STD consec. #060 - #065



Station ID and positions are as follows:

P = 50°00'N, 145°00'W
 E3 = 49°52'N, 144°52'W
 E4 = 49°43'N, 144°44'W
 C1 = 49°42'N, 145°00'W
 W4 = 49°43'N, 145°15'W
 W3 = 49°52'N, 145°07'W

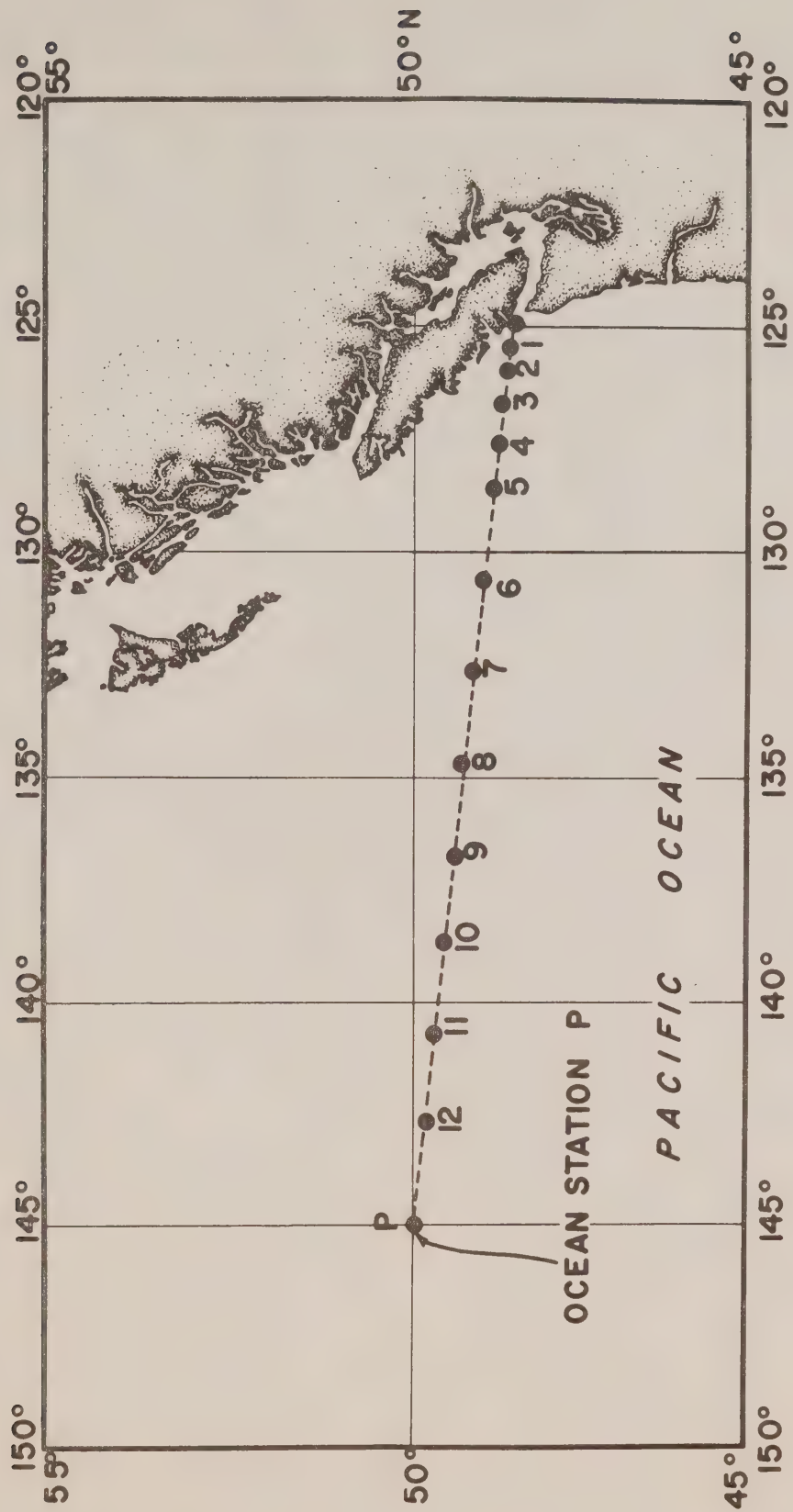


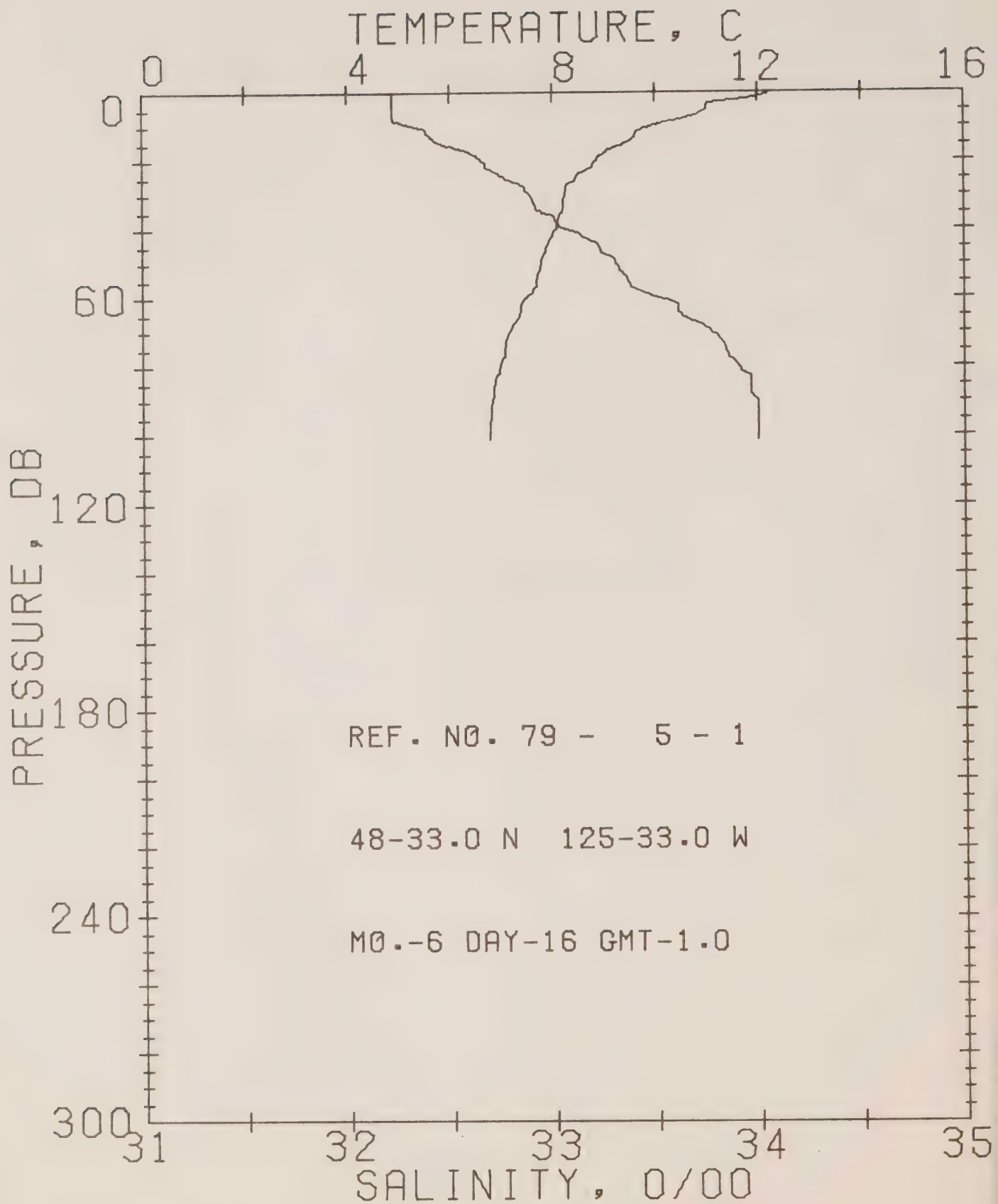
Fig. 1 Chart showing Line P station positions.

Oceanographic Data Obtained on Cruise P-79-5

(MEDS Reference No. 15-79-005)

Results of STD Observations

(P-79-5)



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 1

DATE 16/ 6/79

POSITION 48-33.0N, 125-33.0W

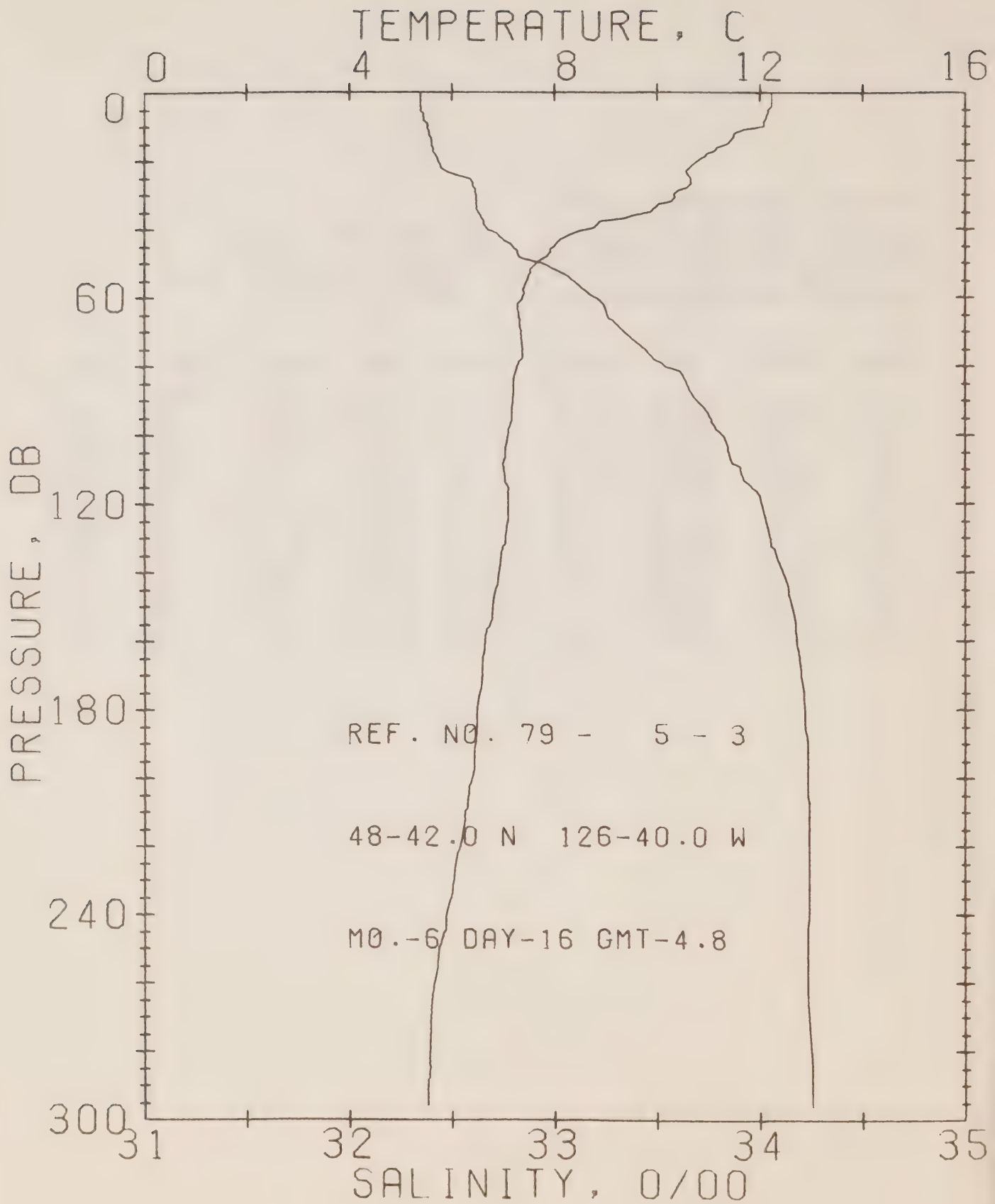
GMT 1.0

STATION 1

RESULTS OF STP CAST 75 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.23	32.22	0	24.41	352.5	.00	.00	1495.
10	9.91	32.33	10	24.91	305.6	.33	.02	1487.
20	8.86	32.65	20	25.33	266.1	.62	.06	1483.
30	8.23	32.89	30	25.61	239.3	.87	.12	1482.
40	8.09	33.06	40	25.76	224.9	1.10	.21	1481.
50	7.78	33.31	50	26.00	202.1	1.31	.30	1481.
60	7.50	33.51	60	26.20	183.6	1.51	.41	1480.
70	7.16	33.79	70	26.46	158.5	1.68	.53	1479.
80	6.98	33.91	79	26.59	147.2	1.83	.64	1479.
90	6.82	34.00	89	26.68	138.5	1.97	.77	1478.
100	6.78	34.00	99	26.68	138.2	2.11	.90	1478.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 3

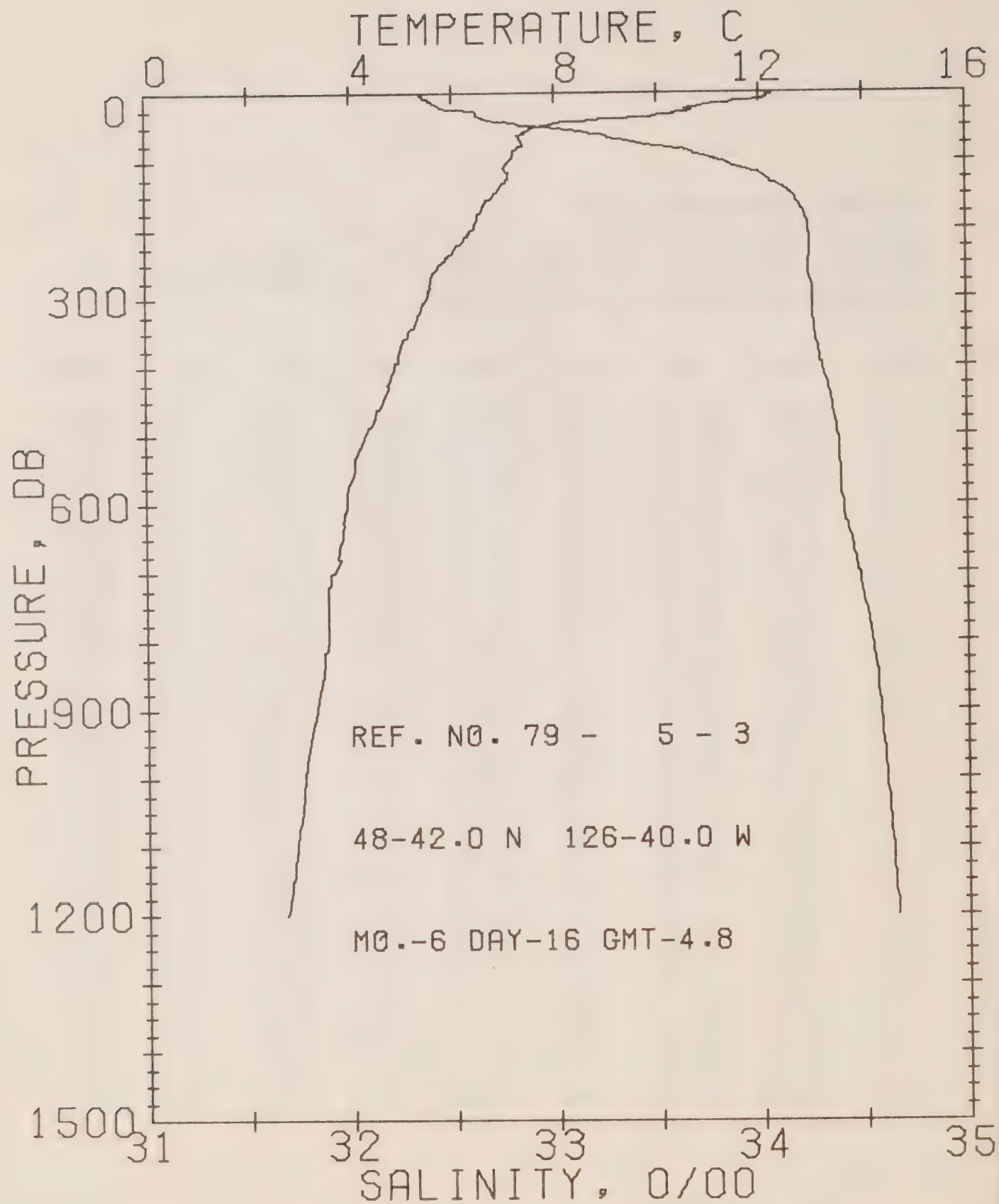
DATE 16/ 6/79

POSITION 48-42.0N, 126-40.0W GMT 4.8 STATION 3

RESULTS OF STP CAST 153 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.25	32.35	0	24.51	343.3	.00	.00	1495.
10	12.07	32.38	10	24.57	338.1	.34	.02	1495.
20	10.83	32.43	20	24.83	312.9	.66	.07	1490.
30	10.33	32.62	30	25.06	291.2	.97	.14	1489.
40	8.77	32.67	40	25.35	263.6	1.25	.24	1483.
50	7.66	32.95	50	25.74	227.3	1.49	.35	1480.
60	7.39	33.20	60	25.97	205.2	1.71	.47	1479.
70	7.37	33.34	70	26.08	194.6	1.90	.61	1479.
80	7.29	33.54	80	26.25	178.8	2.09	.75	1480.
90	7.19	33.70	89	26.39	165.9	2.26	.90	1480.
100	7.09	33.83	99	26.51	154.9	2.42	1.05	1479.
110	7.02	33.91	109	26.58	148.1	2.57	1.22	1479.
120	7.09	34.01	119	26.65	141.7	2.72	1.39	1480.
130	7.05	34.05	129	26.69	138.4	2.86	1.56	1480.
140	6.92	34.11	139	26.75	132.1	2.99	1.75	1480.
150	6.80	34.15	149	26.80	127.7	3.12	1.94	1480.
160	6.64	34.18	159	26.84	123.8	3.25	2.14	1479.
170	6.58	34.20	169	26.87	121.7	3.37	2.35	1479.
180	6.48	34.22	179	26.90	119.0	3.49	2.56	1479.
190	6.45	34.23	189	26.91	118.1	3.61	2.79	1479.
200	6.40	34.23	199	26.92	117.5	3.73	3.02	1479.
210	6.25	34.24	209	26.94	115.0	3.85	3.26	1478.
220	6.16	34.24	218	26.95	114.0	3.96	3.51	1478.
230	6.03	34.24	228	26.97	112.5	4.07	3.77	1478.
240	5.89	34.24	238	26.99	110.9	4.19	4.04	1478.
250	5.72	34.23	248	27.00	109.7	4.30	4.32	1477.
260	5.65	34.23	258	27.01	109.0	4.41	4.60	1477.
270	5.57	34.24	268	27.03	107.5	4.51	4.89	1477.
280	5.55	34.25	278	27.04	106.8	4.62	5.19	1477.
290	5.52	34.25	288	27.04	106.3	4.73	5.50	1477.
300	5.48	34.25	298	27.05	105.9	4.83	5.82	1477.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 3

DATE 16/ 6/79

POSITION 48-42.0N, 126-40.0W

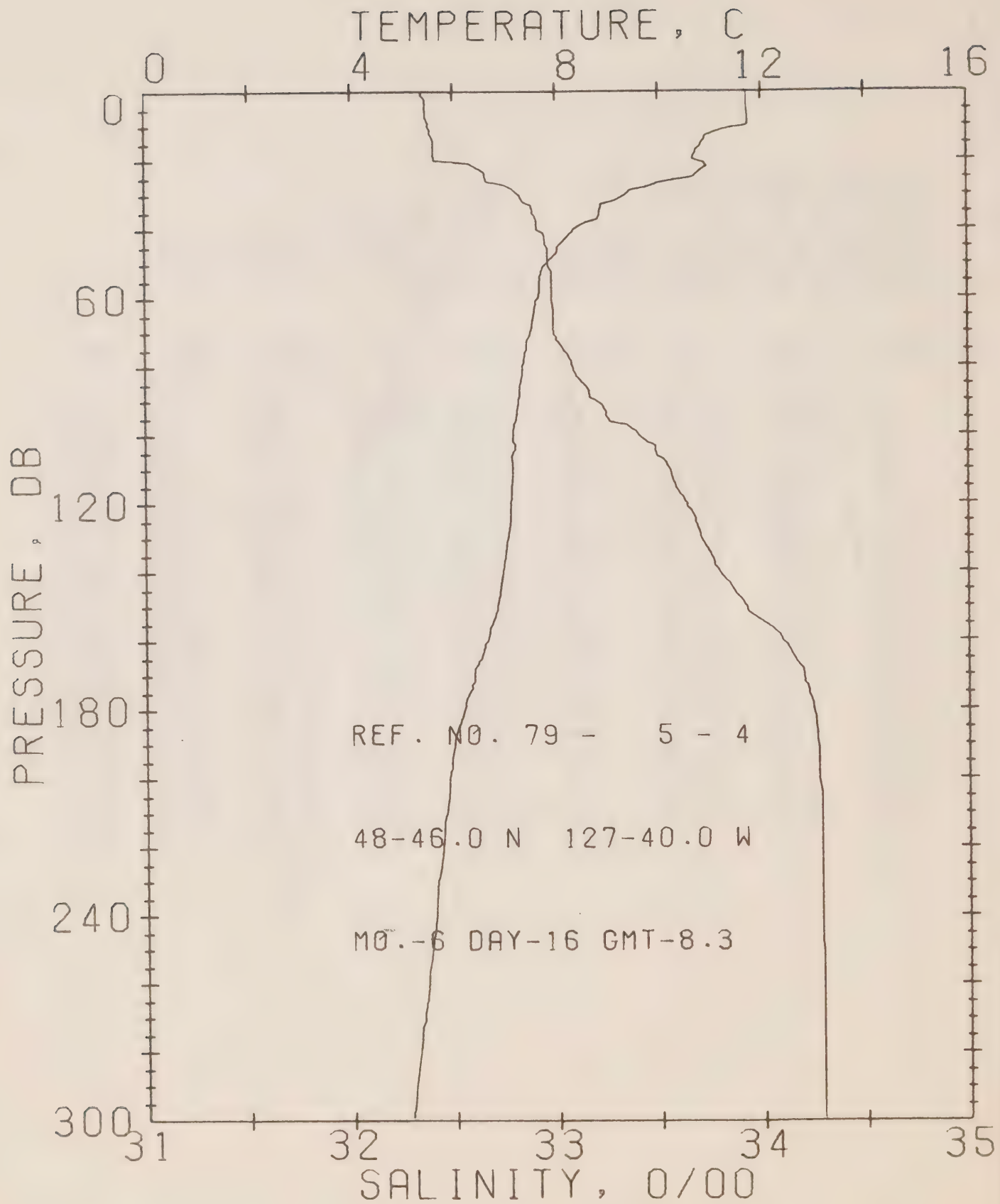
GMT 4.8

STATION 3

RESULTS OF STP CAST 281 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.25	32.35	0	24.51	343.3	.00	.00	1495.
10	12.07	32.38	10	24.57	338.1	.34	.02	1495.
20	10.83	32.43	20	24.83	312.9	.66	.07	1490.
30	10.33	32.62	30	25.06	291.2	.97	.14	1489.
50	7.66	32.95	50	25.74	227.3	1.49	.35	1480.
75	7.38	33.45	75	26.17	186.7	2.00	.68	1480.
100	7.09	33.83	99	26.51	154.9	2.42	1.05	1479.
125	7.08	34.03	124	26.67	140.3	2.79	1.47	1480.
150	6.80	34.15	149	26.80	127.7	3.12	1.94	1480.
175	6.54	34.21	174	26.88	120.5	3.43	2.45	1479.
200	6.40	34.23	199	26.92	117.5	3.73	3.02	1479.
225	6.07	34.24	223	26.97	112.9	4.02	3.64	1478.
250	5.72	34.23	248	27.00	109.7	4.30	4.32	1477.
300	5.48	34.25	298	27.05	105.9	4.83	5.82	1477.
400	4.86	34.30	397	27.16	96.0	5.85	9.43	1476.
500	4.28	34.38	496	27.28	84.7	6.75	13.57	1475.
600	3.92	34.40	595	27.34	79.8	7.57	18.15	1476.
800	3.54	34.53	793	27.48	67.3	9.03	28.50	1477.
1000	3.06	34.60	990	27.58	58.5	10.28	39.95	1479.
1200	2.69	34.65	1188	27.66	52.0	11.38	52.34	1481.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 4

DATE 16/ 6/79

POSITION 48-46.0N, 127-40.0W

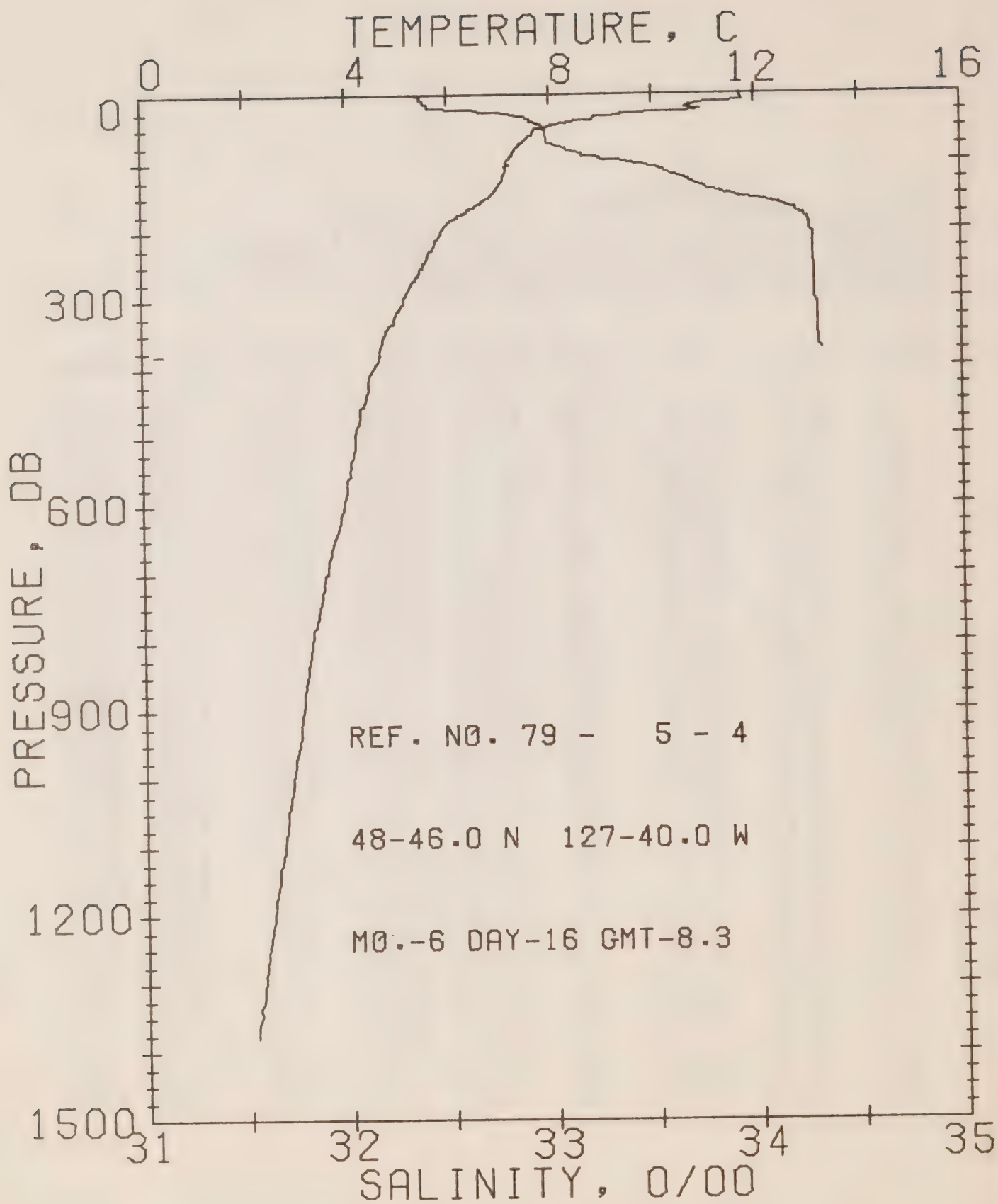
GMT 8.3

STATION 4

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.74	32.35	0	24.60	334.3	.00	.00	1493.
10	11.77	32.38	10	24.62	332.8	.33	.02	1494.
20	10.66	32.41	20	24.84	311.9	.65	.07	1490.
30	9.38	32.83	30	25.38	260.7	.94	.14	1486.
40	8.35	32.91	40	25.61	239.7	1.19	.23	1482.
50	7.81	32.96	50	25.72	228.6	1.42	.33	1480.
60	7.65	32.98	60	25.76	225.0	1.65	.46	1480.
70	7.49	32.99	70	25.79	222.3	1.87	.61	1479.
80	7.34	33.08	80	25.88	213.7	2.09	.77	1479.
90	7.24	33.20	89	25.99	203.6	2.30	.96	1479.
100	7.15	33.40	99	26.16	187.7	2.49	1.15	1479.
110	7.15	33.55	109	26.28	176.7	2.67	1.34	1480.
120	7.09	33.63	119	26.35	170.1	2.85	1.54	1480.
130	7.04	33.70	129	26.41	164.3	3.01	1.76	1480.
140	6.94	33.79	139	26.50	156.5	3.18	1.98	1480.
150	6.84	33.92	149	26.61	145.6	3.33	2.20	1479.
160	6.65	34.09	159	26.77	130.6	3.46	2.42	1479.
170	6.38	34.19	169	26.89	119.5	3.59	2.63	1478.
180	6.17	34.24	179	26.96	113.3	3.70	2.83	1478.
190	5.98	34.26	189	27.00	109.4	3.82	3.04	1477.
200	5.88	34.27	199	27.01	108.0	3.92	3.26	1477.
210	5.80	34.28	209	27.03	106.4	4.03	3.48	1477.
220	5.73	34.28	218	27.04	105.7	4.14	3.72	1477.
230	5.63	34.28	228	27.05	104.6	4.24	3.96	1476.
240	5.59	34.28	238	27.06	104.2	4.35	4.21	1476.
250	5.51	34.29	248	27.07	102.7	4.45	4.47	1476.
260	5.43	34.29	258	27.08	101.8	4.55	4.73	1476.
270	5.37	34.29	268	27.09	101.2	4.65	5.01	1476.
280	5.26	34.29	278	27.10	100.1	4.75	5.29	1476.
290	5.19	34.29	288	27.11	99.4	4.85	5.58	1476.
300	5.12	34.29	298	27.12	98.5	4.95	5.87	1475.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 4

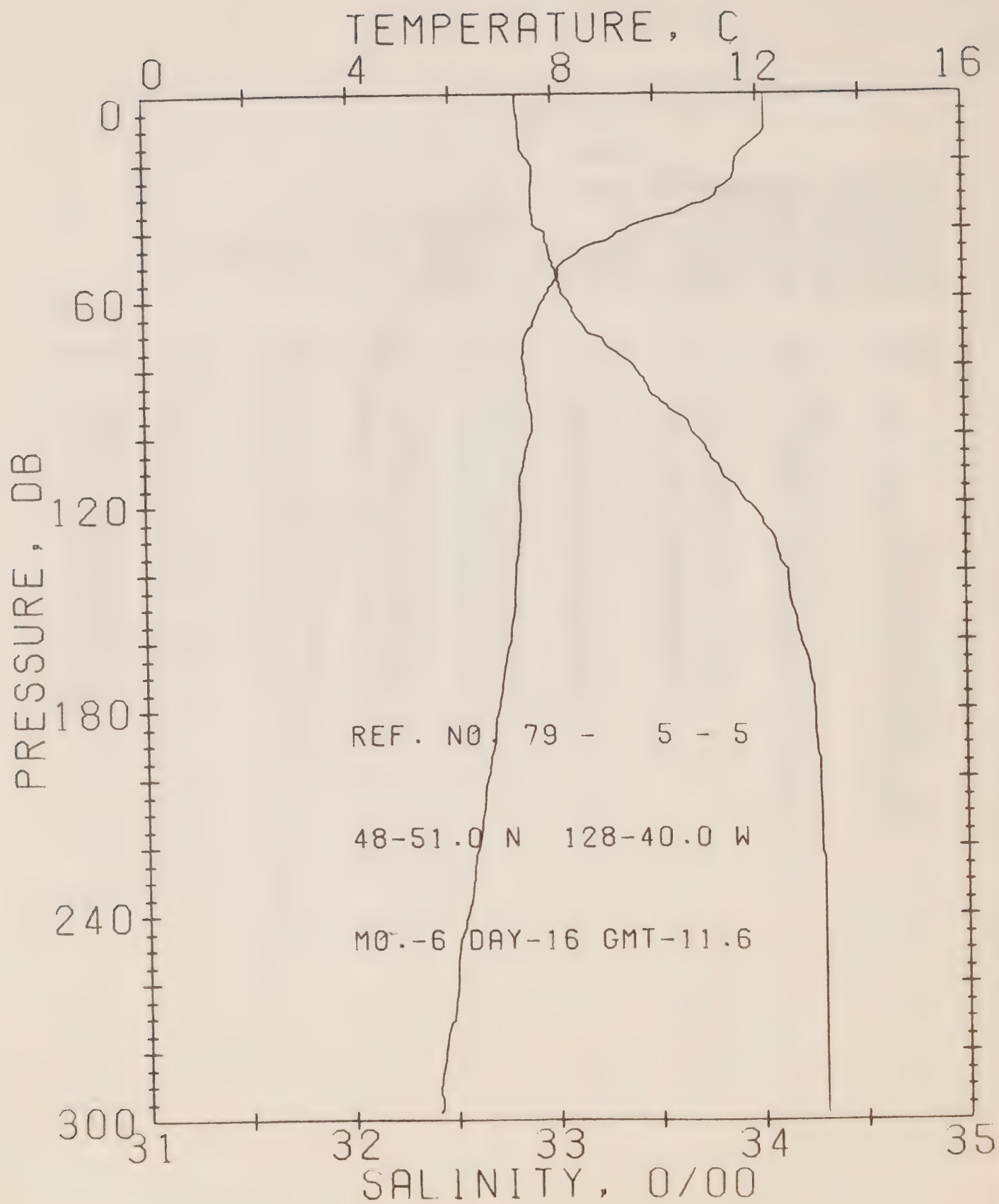
DATE 16/ 6/79

POSITION 48-46.0N, 127-40.0W GMT 8.3 STATION 4

RESULTS OF STP CAST 330 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.74	32.35	0	24.60	334.3	.00	.00	1493.
10	11.77	32.38	10	24.62	332.8	.33	.02	1494.
20	10.66	32.41	20	24.84	311.9	.65	.07	1490.
30	9.38	32.83	30	25.38	260.7	.94	.14	1486.
50	7.81	32.96	50	25.72	228.6	1.42	.33	1480.
75	7.41	33.04	75	25.84	217.6	1.98	.69	1479.
100	7.15	33.40	99	26.16	187.7	2.49	1.15	1479.
125	7.09	33.67	124	26.38	167.2	2.93	1.65	1480.
150	6.84	33.92	149	26.61	145.6	3.33	2.20	1479.
175	6.26	34.22	174	26.93	116.2	3.65	2.73	1478.
200	5.88	34.27	199	27.01	108.0	3.92	3.26	1477.
225	5.69	34.28	223	27.04	105.3	4.19	3.83	1477.
250	5.51	34.29	248	27.07	102.7	4.45	4.47	1476.
300	5.12	34.29	298	27.12	98.5	4.95	5.87	1475.
400	4.54							
500	4.17							
600	3.94							
800	3.29							
1000	2.88							
1200	2.48							



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 5

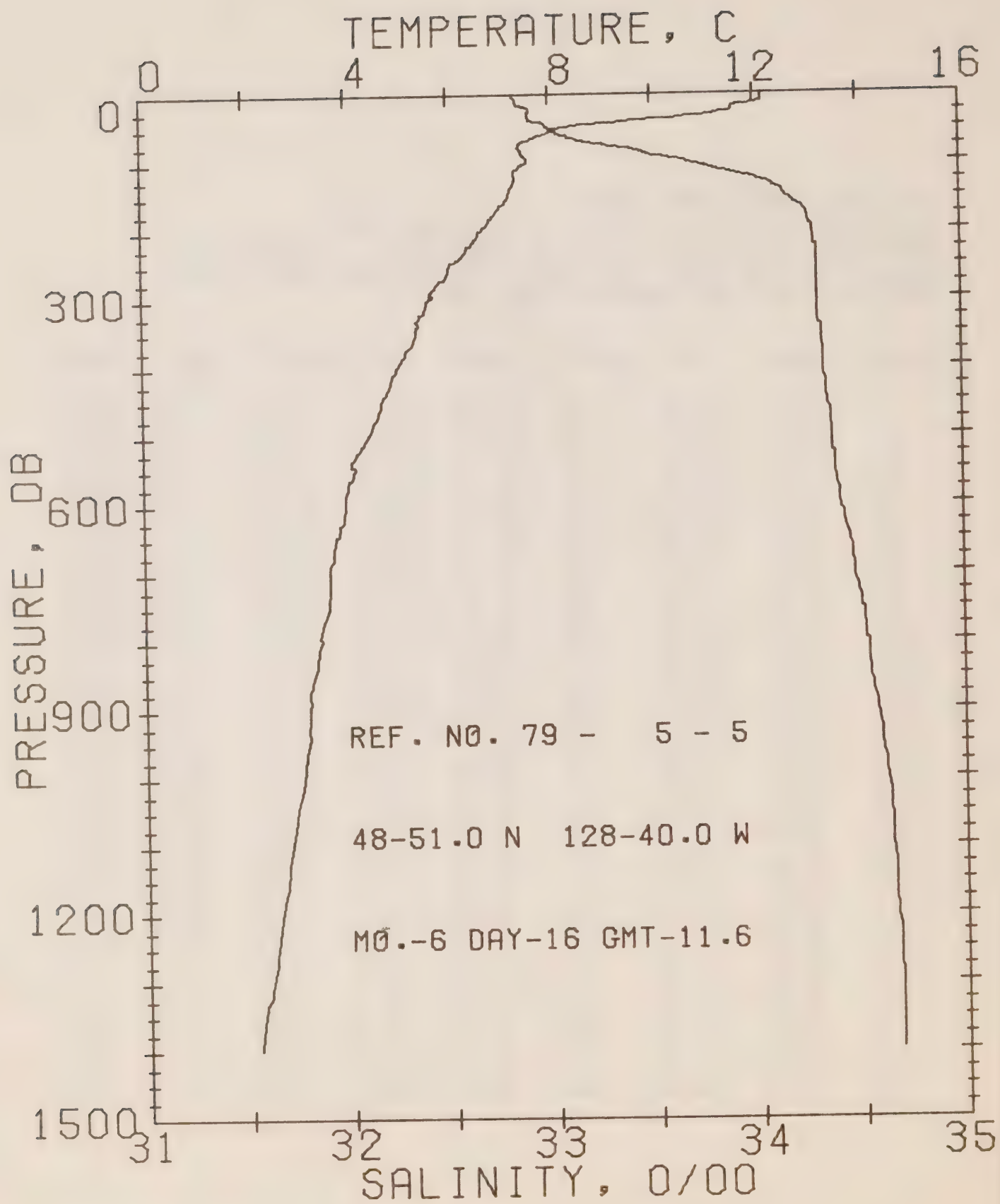
DATE 16/ 6/79

POSITION 48-51.0N, 128-40.0W GMT 11.6 STATION 5

RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.17	32.83	0	24.90	306.6	.00	.00	1495.
10	12.17	32.84	10	24.90	306.1	.31	.02	1496.
20	11.59	32.89	20	25.05	292.0	.61	.06	1494.
30	11.19	32.90	30	25.13	284.9	.89	.13	1492.
40	9.44	32.97	40	25.48	251.5	1.16	.23	1486.
50	8.16	33.00	50	25.70	230.5	1.40	.34	1482.
60	7.83	33.07	60	25.81	220.8	1.63	.47	1481.
70	7.46	33.17	70	25.94	208.5	1.85	.61	1480.
80	7.43	33.40	80	26.12	191.1	2.04	.76	1480.
90	7.48	33.52	89	26.21	183.0	2.23	.92	1480.
100	7.53	33.69	99	26.34	171.2	2.41	1.09	1481.
110	7.36	33.82	109	26.46	159.7	2.57	1.27	1481.
120	7.33	33.96	119	26.58	148.8	2.73	1.45	1481.
130	7.30	34.07	129	26.67	140.3	2.87	1.64	1481.
140	7.22	34.13	139	26.73	134.9	3.01	1.83	1481.
150	7.19	34.15	149	26.74	133.2	3.14	2.02	1481.
160	7.11	34.19	159	26.79	129.3	3.28	2.23	1481.
170	6.96	34.24	169	26.85	123.9	3.40	2.44	1481.
180	6.85	34.26	179	26.88	121.0	3.52	2.66	1480.
190	6.77	34.27	189	26.90	119.3	3.64	2.89	1480.
200	6.65	34.28	199	26.92	117.0	3.76	3.12	1480.
210	6.55	34.29	209	26.94	115.2	3.88	3.37	1480.
220	6.45	34.29	218	26.96	114.0	3.99	3.62	1480.
230	6.34	34.30	228	26.98	112.0	4.11	3.87	1479.
240	6.22	34.30	238	26.99	110.6	4.22	4.14	1479.
250	6.04	34.30	248	27.02	108.4	4.33	4.41	1478.
260	6.00	34.30	258	27.02	108.1	4.43	4.70	1478.
270	5.92	34.30	268	27.03	107.2	4.54	4.99	1478.
280	5.75	34.30	278	27.05	105.2	4.65	5.28	1478.
290	5.65	34.30	288	27.07	104.1	4.75	5.59	1477.
300	5.61	34.30	298	27.07	103.7	4.86	5.90	1477.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 5

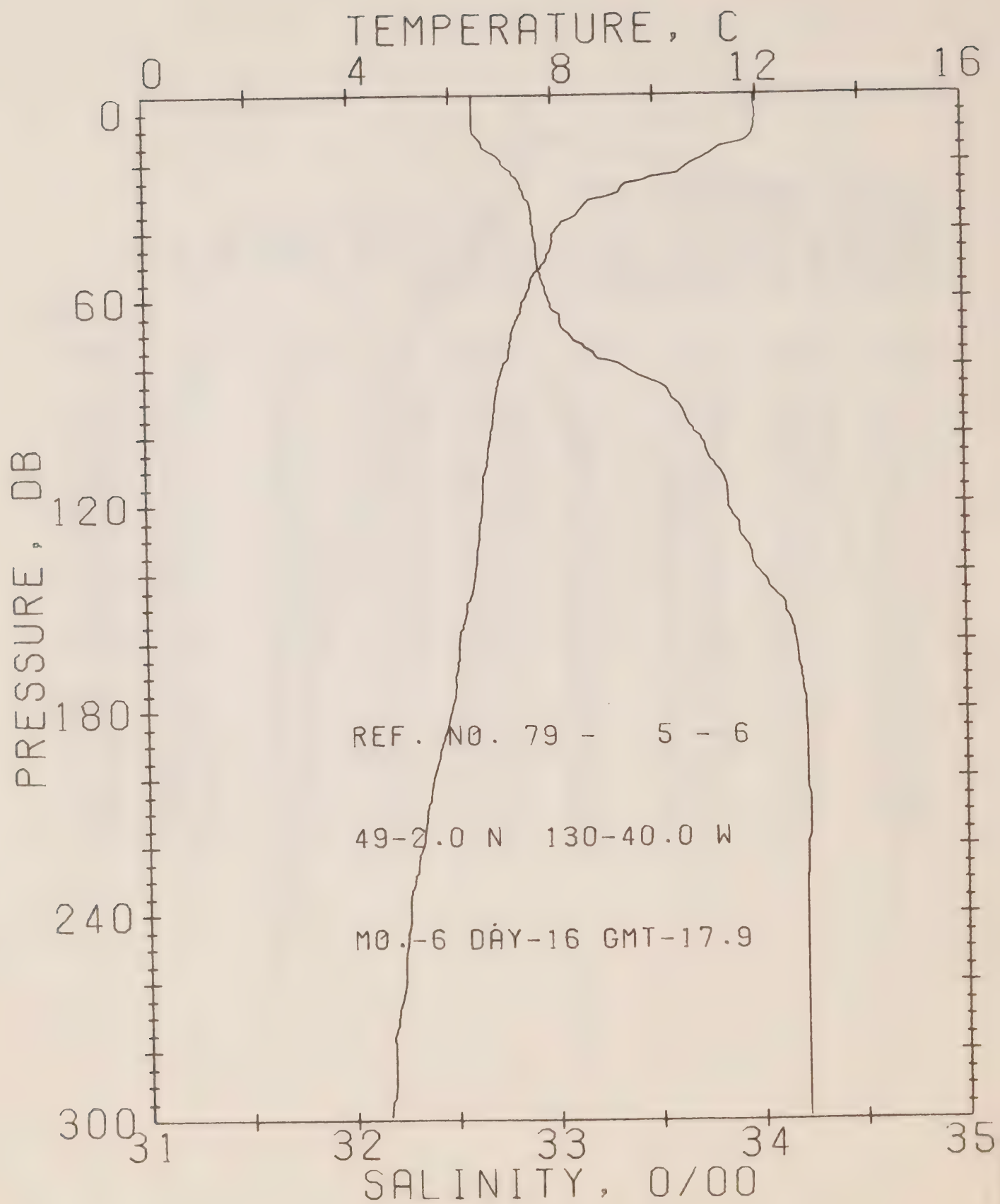
DATE 16/ 6/79

POSITION 48-51.0N, 128-40.0W GMT 11.6 STATION 5

RESULTS OF STP CAST 351 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.17	32.83	0	24.90	306.6	.00	.00	1495.
10	12.17	32.84	10	24.90	306.1	.31	.02	1496.
20	11.59	32.89	20	25.05	292.0	.61	.06	1494.
30	11.19	32.90	30	25.13	284.9	.89	.13	1492.
50	8.16	33.00	50	25.70	230.5	1.40	.34	1482.
75	7.41	33.30	75	26.05	198.2	1.95	.68	1480.
100	7.53	33.69	99	26.34	171.2	2.41	1.09	1481.
125	7.32	34.01	124	26.62	145.0	2.80	1.54	1481.
150	7.19	34.15	149	26.74	133.2	3.14	2.02	1481.
175	6.92	34.25	174	26.86	122.5	3.46	2.55	1481.
200	6.65	34.28	199	26.92	117.0	3.76	3.12	1480.
225	6.38	34.30	223	26.97	112.4	4.05	3.74	1479.
250	6.04	34.30	248	27.02	108.4	4.33	4.41	1478.
300	5.61	34.30	298	27.07	103.7	4.86	5.90	1477.
400	4.98	34.33	397	27.17	95.1	5.85	9.45	1477.
500	4.40	34.37	496	27.27	86.4	6.76	13.61	1476.
600	3.95	34.40	595	27.34	79.7	7.59	18.24	1476.
800	3.44	34.53	793	27.49	66.4	9.04	28.53	1477.
1000	3.07	34.62	990	27.60	57.1	10.27	39.83	1479.
1200	2.60	34.66	1188	27.67	50.2	11.34	51.78	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 6

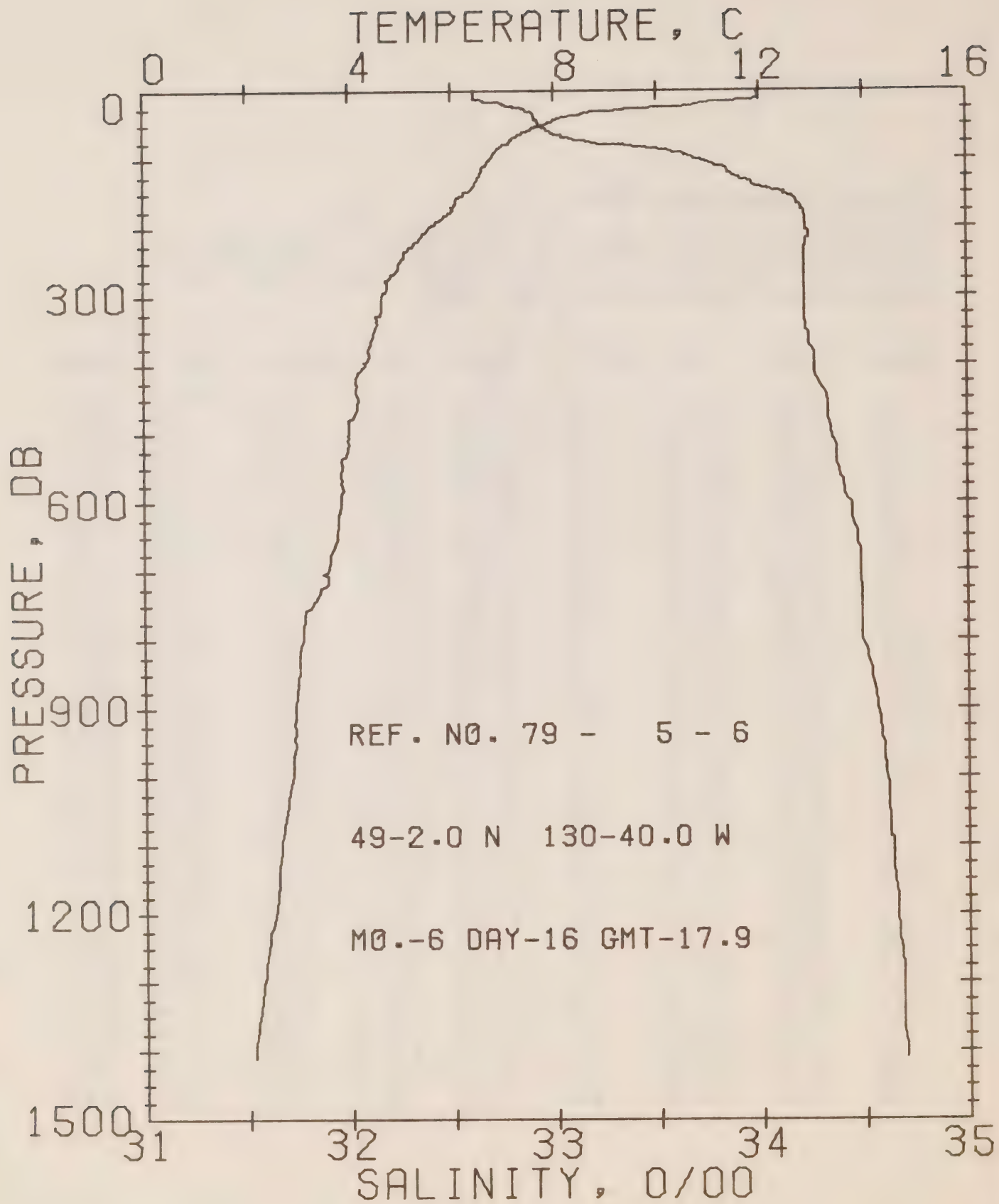
DATE 16/ 6/79

POSITION 49- 2.0N, 130-40.0W GMT 17.9 STATION 6

RESULTS OF STP CAST 182 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.94	32.61	0	24.77	318.7	.00	.00	1494.
10	11.97	32.61	10	24.76	319.4	.32	.02	1495.
20	10.75	32.75	20	25.09	288.3	.62	.06	1491.
30	9.05	32.87	30	25.47	252.8	.89	.13	1485.
40	8.06	32.91	40	25.65	235.6	1.14	.22	1481.
50	7.79	32.93	50	25.70	230.5	1.37	.32	1480.
60	7.44	32.98	60	25.79	222.2	1.59	.45	1479.
70	7.18	33.08	70	25.91	211.4	1.81	.59	1478.
80	7.00	33.35	80	26.14	189.1	2.01	.75	1478.
90	6.85	33.59	89	26.35	169.4	2.19	.90	1478.
100	6.74	33.71	99	26.46	159.2	2.36	1.06	1478.
110	6.64	33.81	109	26.55	150.6	2.51	1.23	1478.
120	6.57	33.85	119	26.59	147.0	2.66	1.40	1478.
130	6.50	33.92	129	26.66	140.9	2.80	1.58	1478.
140	6.42	34.00	139	26.73	134.3	2.94	1.77	1478.
150	6.23	34.12	149	26.85	122.9	3.07	1.96	1477.
160	6.10	34.17	159	26.90	117.8	3.19	2.15	1477.
170	6.01	34.19	169	26.93	115.2	3.31	2.35	1477.
180	5.91	34.21	179	26.96	112.6	3.42	2.55	1477.
190	5.73	34.22	189	26.99	109.8	3.53	2.76	1476.
200	5.55	34.22	199	27.01	107.8	3.64	2.98	1475.
210	5.41	34.23	208	27.04	105.5	3.75	3.20	1475.
220	5.34	34.22	218	27.04	105.5	3.85	3.43	1475.
230	5.17	34.21	228	27.05	104.4	3.96	3.67	1474.
240	5.08	34.21	238	27.06	103.5	4.06	3.92	1474.
250	5.00	34.21	248	27.07	102.6	4.16	4.18	1474.
260	4.97	34.21	258	27.08	102.4	4.27	4.44	1474.
270	4.82	34.21	268	27.09	100.8	4.37	4.72	1474.
280	4.75	34.21	278	27.10	100.2	4.47	5.00	1474.
290	4.75	34.21	288	27.10	100.3	4.57	5.29	1474.
300	4.64	34.21	298	27.11	99.1	4.67	5.59	1473.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 6

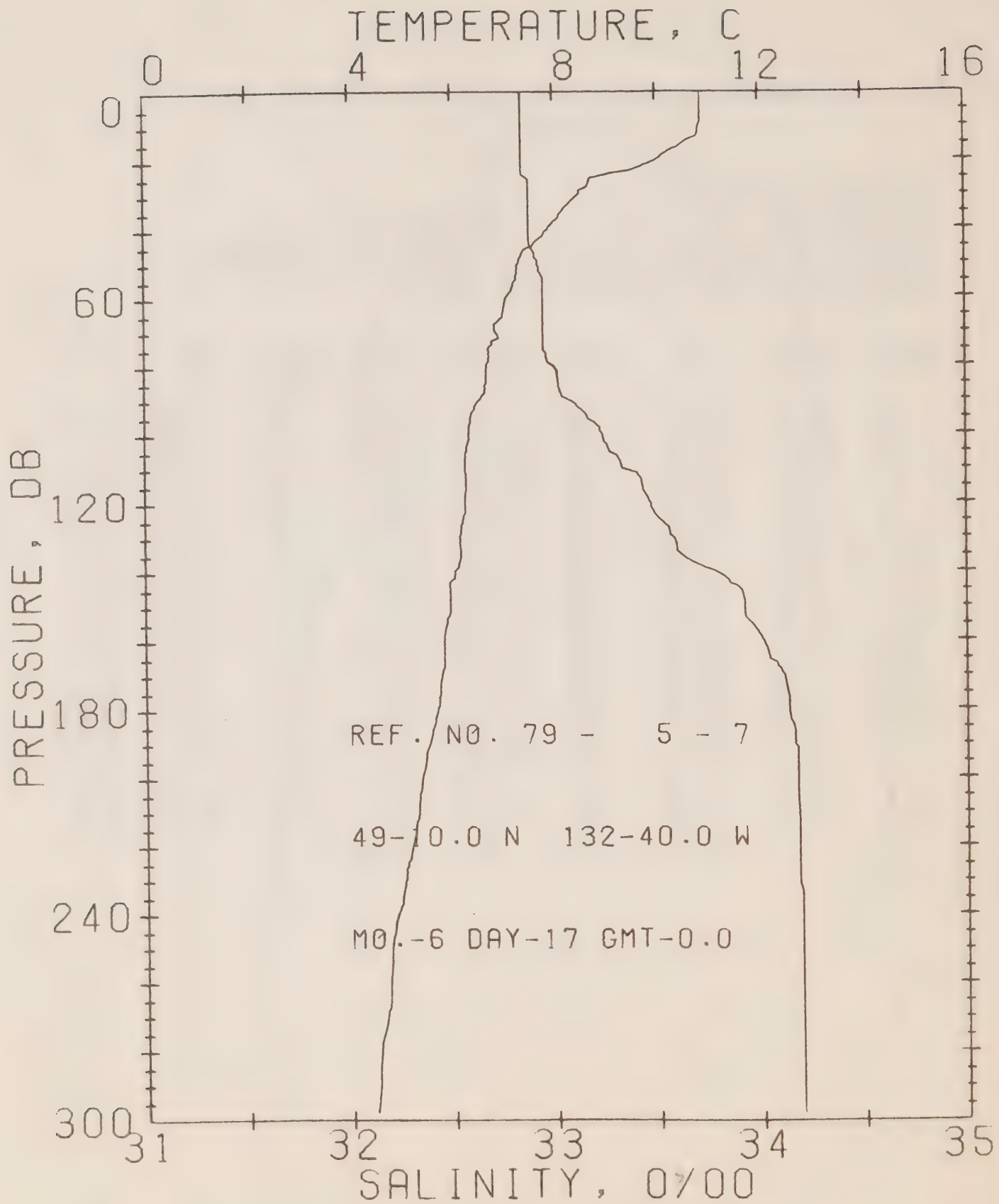
DATE 16/ 6/79

POSITION 49- 2.0N, 130-40.0W GMT 17.9 STATION 6

RESULTS OF STP CAST 349 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.94	32.61	0	24.77	318.7	.00	.00	1494.
10	11.97	32.61	10	24.76	319.4	.32	.02	1495.
20	10.75	32.75	20	25.09	288.3	.62	.06	1491.
30	9.05	32.87	30	25.47	252.8	.89	.13	1485.
50	7.79	32.93	50	25.70	230.5	1.37	.32	1480.
75	7.13	33.19	75	26.00	202.7	1.92	.67	1478.
100	6.74	33.71	99	26.46	159.2	2.36	1.06	1478.
125	6.53	33.90	124	26.64	142.7	2.73	1.49	1478.
150	6.23	34.12	149	26.85	122.9	3.07	1.96	1477.
175	6.00	34.20	174	26.95	114.1	3.36	2.45	1477.
200	5.55	34.22	199	27.01	107.8	3.64	2.98	1475.
225	5.24	34.22	223	27.05	104.4	3.90	3.55	1475.
250	5.00	34.21	248	27.07	102.6	4.16	4.18	1474.
300	4.64	34.21	298	27.11	99.1	4.67	5.59	1473.
400	4.32	34.26	397	27.19	92.8	5.63	9.03	1474.
500	3.99	34.34	496	27.28	84.1	6.51	13.04	1474.
600	3.83	34.43	595	27.38	76.2	7.31	17.54	1475.
800	3.08	34.49	793	27.49	65.4	8.72	27.54	1475.
1000	2.86	34.60	990	27.60	56.0	9.92	38.48	1478.
1200	2.51	34.65	1188	27.67	49.9	10.97	50.27	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 7

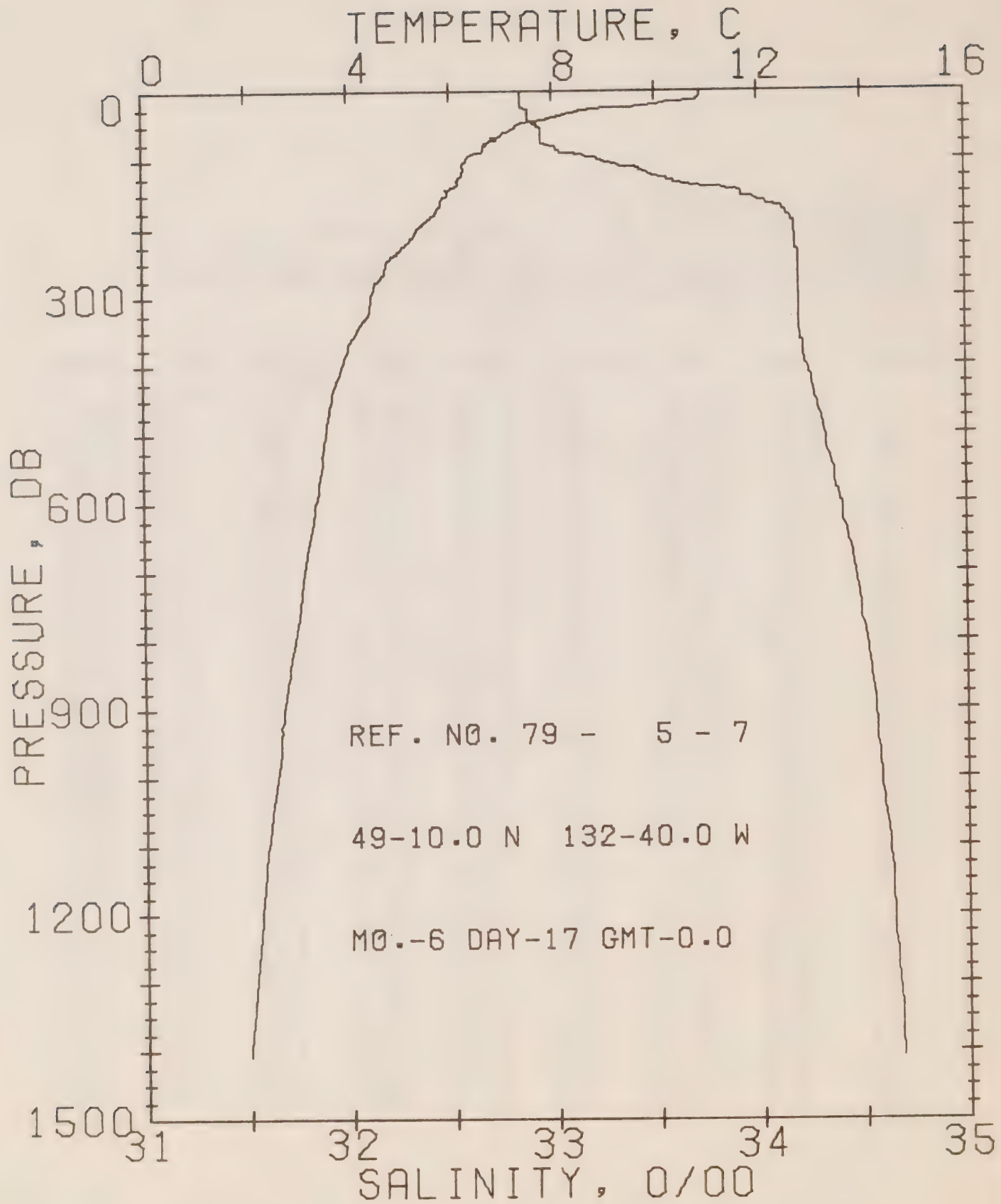
DATE 17/ 6/79

POSITION 49-10.0N, 132-40.0W GMT .0 STATION 7

RESULTS OF STP CAST 183 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.87	32.85	0	25.15	282.5	.00	.00	1491.
10	10.86	32.85	10	25.15	282.6	.28	.01	1491.
20	10.03	32.85	20	25.29	269.2	.56	.06	1488.
30	8.50	32.88	30	25.56	243.9	.81	.12	1483.
40	7.90	32.88	40	25.65	235.6	1.05	.21	1480.
50	7.30	32.92	50	25.76	224.7	1.28	.31	1478.
60	7.07	32.95	60	25.82	219.6	1.50	.44	1478.
70	6.85	32.95	70	25.85	216.8	1.72	.58	1477.
80	6.68	33.00	80	25.91	211.1	1.94	.75	1476.
90	6.53	33.07	89	25.99	204.1	2.15	.93	1476.
100	6.33	33.23	99	26.14	189.8	2.34	1.12	1476.
110	6.24	33.33	109	26.23	181.4	2.53	1.31	1476.
120	6.25	33.47	119	26.34	171.2	2.70	1.52	1476.
130	6.14	33.58	129	26.44	161.8	2.87	1.73	1476.
140	6.03	33.79	139	26.62	144.9	3.03	1.95	1476.
150	5.95	33.92	149	26.73	134.3	3.16	2.15	1476.
160	5.82	34.01	159	26.82	126.2	3.30	2.36	1476.
170	5.76	34.11	169	26.90	118.1	3.42	2.56	1476.
180	5.68	34.13	179	26.93	115.8	3.53	2.77	1476.
190	5.52	34.16	189	26.97	111.8	3.65	2.99	1475.
200	5.36	34.17	199	27.00	109.2	3.76	3.20	1475.
210	5.29	34.18	209	27.01	108.0	3.87	3.43	1475.
220	5.16	34.18	218	27.03	106.4	3.97	3.67	1474.
230	5.03	34.18	228	27.04	105.0	4.08	3.91	1474.
240	4.88	34.19	238	27.07	102.7	4.18	4.16	1473.
250	4.76	34.19	248	27.08	101.4	4.29	4.41	1473.
260	4.73	34.19	258	27.09	101.2	4.39	4.67	1473.
270	4.66	34.19	268	27.09	100.5	4.49	4.95	1473.
280	4.54	34.19	278	27.11	99.3	4.59	5.23	1473.
290	4.50	34.19	288	27.11	99.0	4.69	5.52	1473.
300	4.45	34.19	298	27.12	98.5	4.79	5.81	1473.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 7

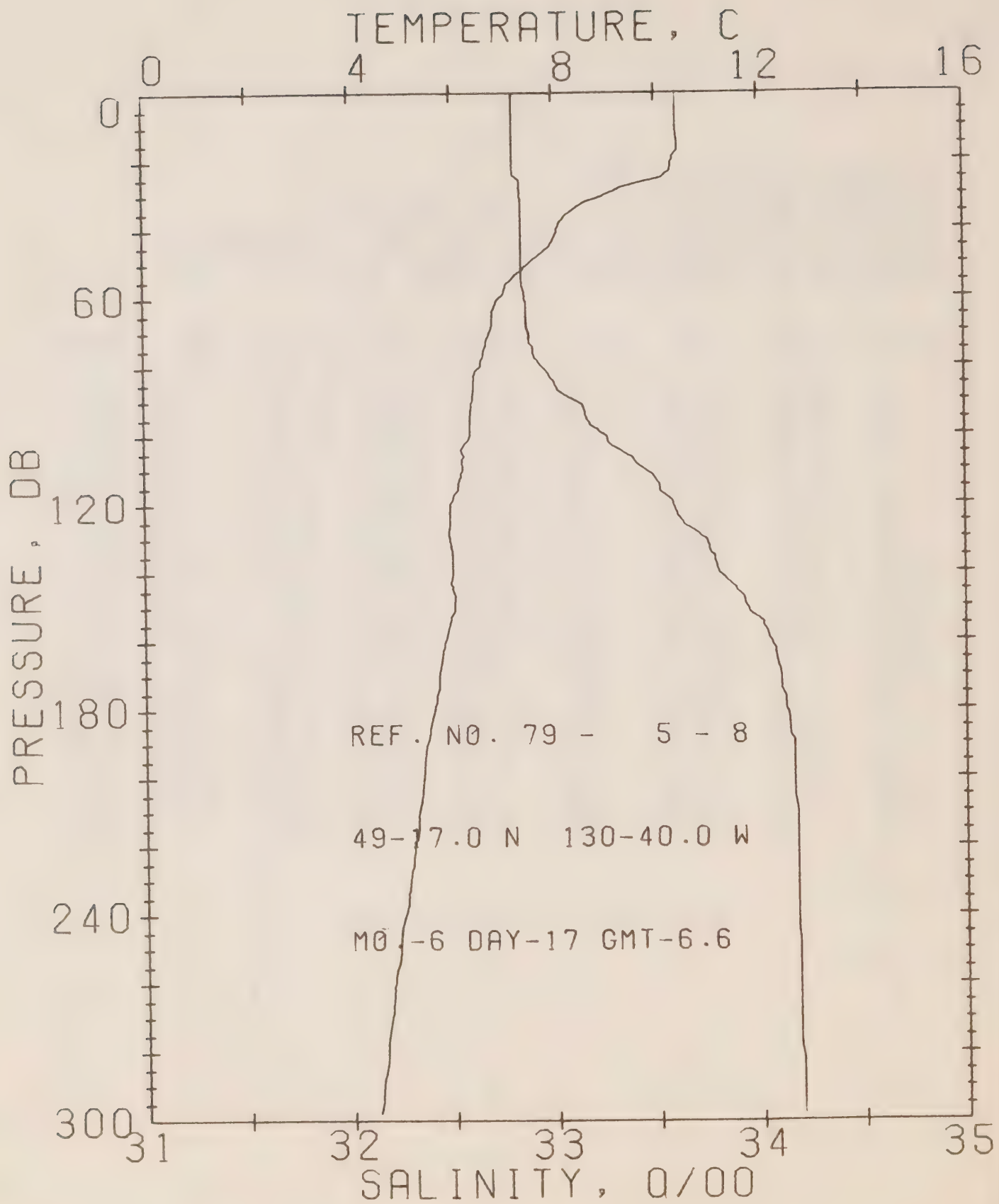
DATE 17/ 6/79

POSITION 49-10.0N, 132-40.0W GMT .0 STATION 7

RESULTS OF STP CAST 313 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.87	32.85	0	25.15	282.5	.00	.00	1491.
10	10.86	32.85	10	25.15	282.6	.28	.01	1491.
20	10.03	32.85	20	25.29	269.2	.56	.06	1488.
30	8.50	32.88	30	25.56	243.9	.81	.12	1483.
50	7.30	32.92	50	25.76	224.7	1.28	.31	1478.
75	6.69	32.95	75	25.87	214.9	1.83	.66	1476.
100	6.33	33.23	99	26.14	189.8	2.34	1.12	1476.
125	6.20	33.52	124	26.38	166.9	2.79	1.62	1476.
150	5.95	33.92	149	26.73	134.3	3.16	2.15	1476.
175	5.73	34.13	174	26.92	116.5	3.48	2.67	1476.
200	5.36	34.17	199	27.00	109.2	3.76	3.20	1475.
225	5.08	34.18	223	27.04	105.5	4.03	3.79	1474.
250	4.76	34.19	248	27.08	101.4	4.29	4.41	1473.
300	4.45	34.19	298	27.12	98.5	4.79	5.81	1473.
400	3.87	34.22	397	27.21	90.6	5.74	9.21	1472.
500	3.56	34.32	496	27.31	81.2	6.59	13.11	1472.
600	3.34	34.40	595	27.40	73.5	7.37	17.48	1473.
800	2.94	34.51	793	27.53	62.2	8.73	27.11	1475.
1000	2.56	34.58	990	27.61	54.6	9.89	37.73	1477.
1200	2.24	34.64	1188	27.69	47.7	10.90	49.07	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 8

DATE 17/ 6/79

POSITION 49-17.0N, 130-40.0W

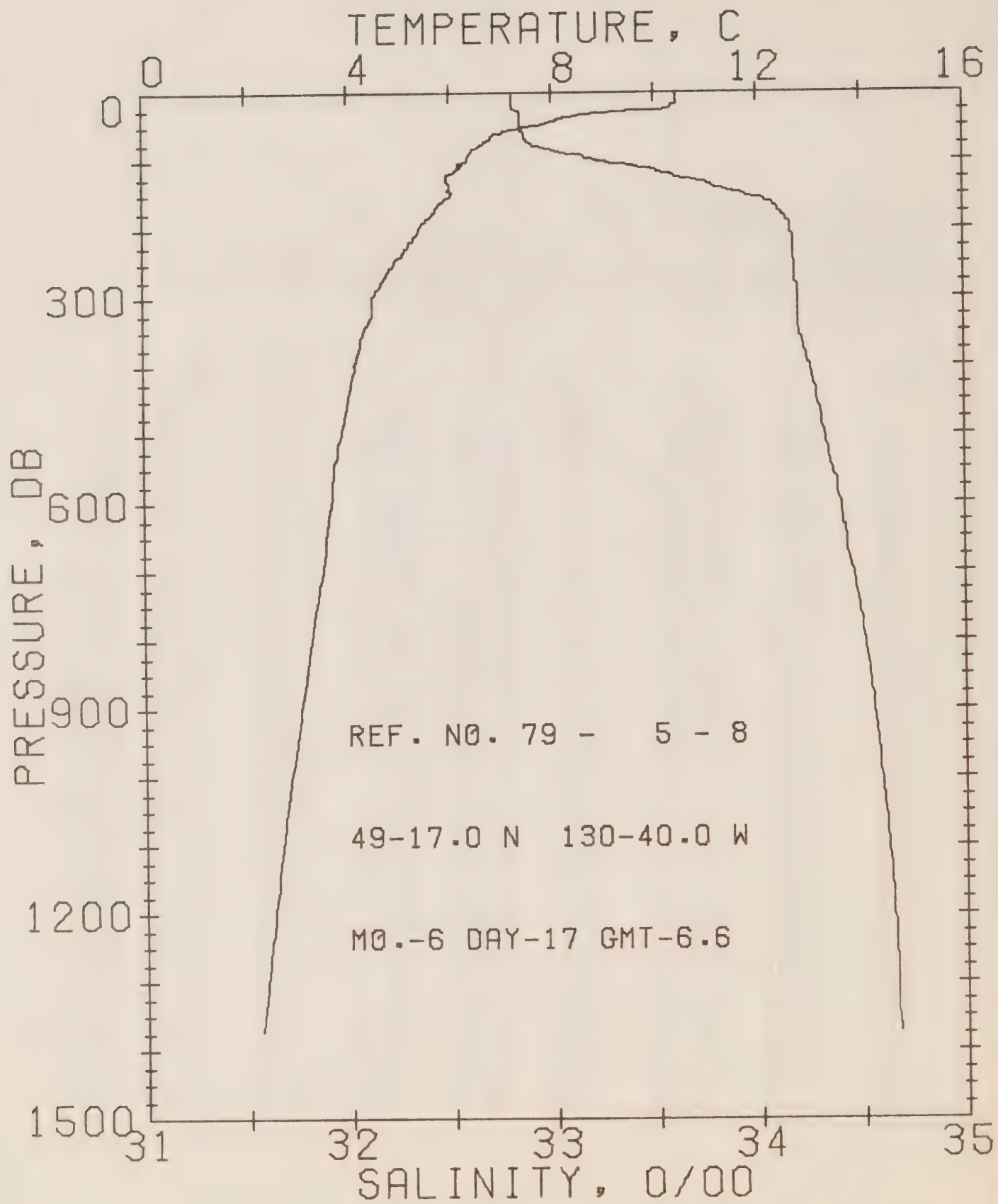
GMT 6.6

STATION 8

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.42	32.81	0	25.20	278.1	.00	.00	1489.
10	10.43	32.81	10	25.19	278.4	.28	.01	1489.
20	10.34	32.81	20	25.21	277.2	.56	.06	1489.
30	9.01	32.84	30	25.45	254.4	.83	.13	1484.
40	8.09	32.85	40	25.60	240.5	1.07	.21	1481.
50	7.52	32.85	50	25.68	232.8	1.31	.32	1479.
60	6.93	32.86	60	25.77	224.4	1.54	.45	1477.
70	6.75	32.88	70	25.81	220.8	1.76	.60	1476.
80	6.55	32.95	80	25.89	213.2	1.98	.76	1476.
90	6.39	33.11	89	26.04	199.4	2.18	.94	1476.
100	6.35	33.26	99	26.16	187.8	2.38	1.13	1476.
110	6.22	33.45	109	26.32	172.2	2.56	1.32	1476.
120	5.96	33.58	119	26.46	159.4	2.72	1.52	1475.
130	5.96	33.74	129	26.59	147.6	2.88	1.72	1475.
140	6.01	33.80	139	26.63	143.9	3.03	1.92	1476.
150	6.02	33.94	149	26.74	133.7	3.16	2.12	1476.
160	5.84	34.05	159	26.84	123.4	3.29	2.32	1476.
170	5.71	34.10	169	26.90	118.3	3.41	2.52	1475.
180	5.62	34.12	179	26.93	115.4	3.53	2.73	1475.
190	5.46	34.16	189	26.98	111.0	3.64	2.95	1475.
200	5.38	34.16	199	26.99	110.2	3.75	3.17	1475.
210	5.30	34.17	209	27.01	108.6	3.86	3.40	1475.
220	5.20	34.17	218	27.02	107.6	3.97	3.63	1474.
230	5.12	34.17	228	27.03	106.8	4.08	3.88	1474.
240	5.01	34.17	238	27.04	105.6	4.18	4.13	1474.
250	4.91	34.18	248	27.06	103.8	4.29	4.40	1474.
260	4.80	34.18	258	27.07	102.7	4.39	4.66	1473.
270	4.72	34.18	268	27.08	101.9	4.49	4.94	1473.
280	4.64	34.18	278	27.09	100.8	4.60	5.22	1473.
290	4.55	34.19	288	27.11	99.5	4.70	5.51	1473.
300	4.49	34.19	298	27.11	98.9	4.79	5.81	1473.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 8

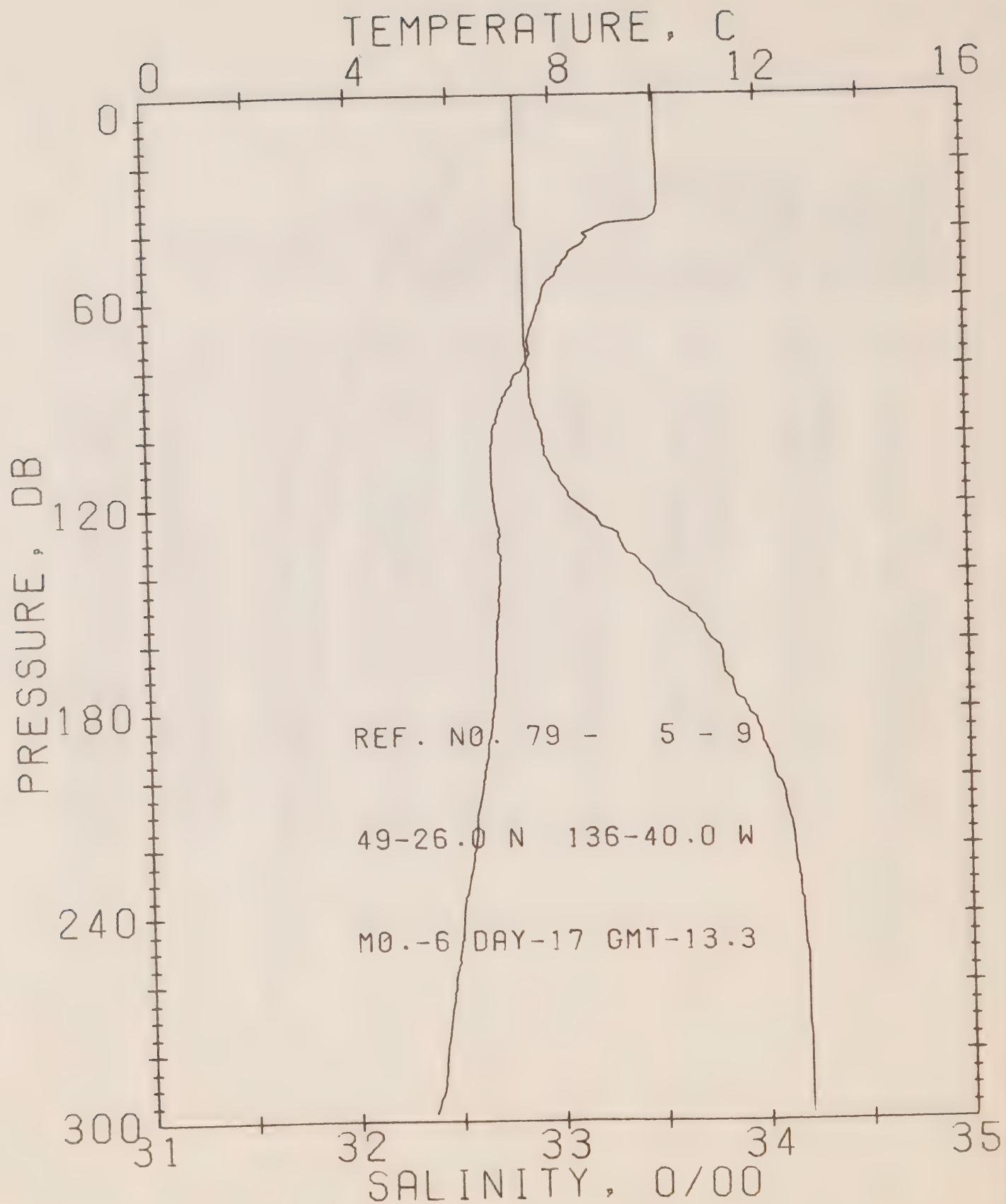
DATE 17/ 6/79

POSITION 49-17.0N, 130-40.0W GMT 6.6 STATION 8

RESULTS OF STP CAST 308 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.42	32.81	0	25.20	278.1	.00	.00	1489.
10	10.43	32.81	10	25.19	278.4	.28	.01	1489.
20	10.34	32.81	20	25.21	277.2	.56	.06	1489.
30	9.01	32.84	30	25.45	254.4	.83	.13	1484.
50	7.52	32.85	50	25.68	232.8	1.31	.32	1479.
75	6.64	32.90	75	25.84	217.9	1.87	.68	1476.
100	6.35	33.26	99	26.16	187.8	2.38	1.13	1476.
125	5.96	33.62	124	26.49	156.5	2.80	1.62	1475.
150	6.02	33.94	149	26.74	133.7	3.16	2.12	1476.
175	5.69	34.11	174	26.91	117.3	3.47	2.63	1476.
200	5.38	34.16	199	26.99	110.2	3.75	3.17	1475.
225	5.18	34.17	223	27.02	107.4	4.02	3.76	1474.
250	4.91	34.18	248	27.06	103.8	4.29	4.40	1474.
300	4.49	34.19	298	27.11	98.9	4.79	5.81	1473.
400	4.12	34.25	397	27.20	91.4	5.76	9.24	1473.
500	3.85	34.32	496	27.29	83.9	6.63	13.25	1473.
600	3.66	34.40	595	27.37	77.0	7.44	17.75	1474.
800	3.26	34.51	793	27.49	65.9	8.87	27.91	1476.
1000	2.85	34.59	990	27.59	57.0	10.09	39.12	1478.
1200	2.51	34.64	1188	27.66	50.6	11.16	51.09	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 9

DATE 17/ 6/79

POSITION 49-26.0N, 136-40.0W

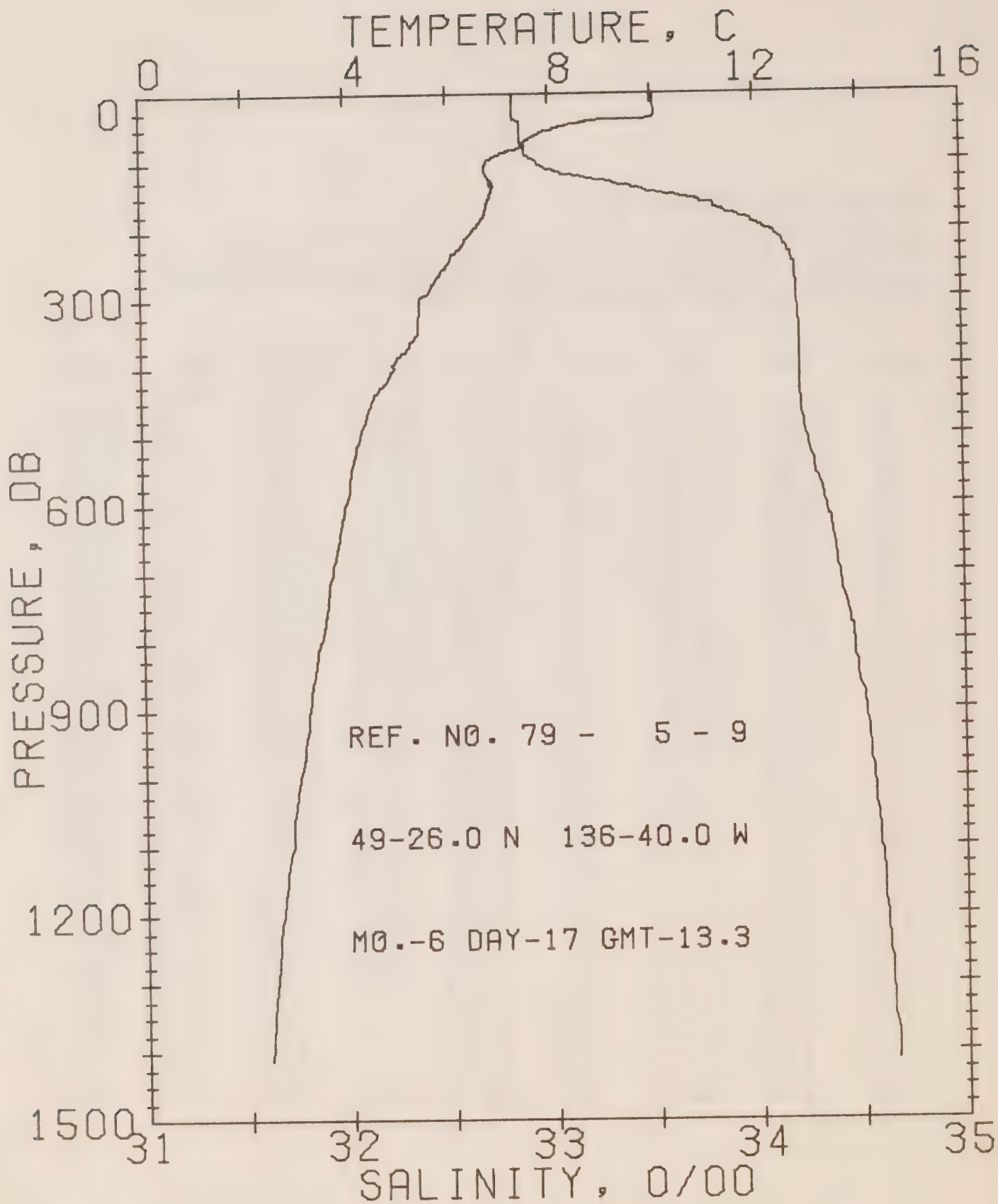
GMT 13.3

STATION 9

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.05	32.83	0	25.27	270.6	.00	.00	1488.
10	10.06	32.83	10	25.27	270.9	.27	.01	1488.
20	10.07	32.83	20	25.27	271.3	.54	.06	1488.
30	10.08	32.83	30	25.27	271.7	.81	.12	1488.
40	8.78	32.86	40	25.50	249.7	1.08	.22	1484.
50	8.18	32.86	50	25.59	241.2	1.32	.33	1482.
60	7.77	32.86	60	25.65	235.5	1.56	.46	1480.
70	7.53	32.86	70	25.69	232.4	1.80	.62	1479.
80	7.40	32.88	80	25.72	229.4	2.03	.80	1479.
90	6.98	32.89	89	25.78	223.3	2.25	.99	1478.
100	6.78	32.94	99	25.85	217.0	2.47	1.21	1477.
110	6.76	32.99	109	25.89	213.2	2.69	1.44	1477.
120	6.79	33.12	119	25.99	204.1	2.90	1.68	1478.
130	6.86	33.31	129	26.13	191.0	3.10	1.93	1478.
140	6.88	33.46	139	26.25	180.2	3.28	2.19	1479.
150	6.86	33.63	149	26.38	167.4	3.46	2.45	1479.
160	6.77	33.77	159	26.50	156.0	3.62	2.70	1479.
170	6.76	33.83	169	26.55	151.5	3.77	2.96	1479.
180	6.70	33.92	179	26.63	143.9	3.92	3.23	1479.
190	6.60	34.00	189	26.71	137.1	4.06	3.49	1479.
200	6.50	34.05	199	26.76	132.2	4.20	3.76	1479.
210	6.37	34.11	209	26.82	126.5	4.32	4.03	1479.
220	6.31	34.13	218	26.85	123.7	4.45	4.30	1479.
230	6.19	34.16	228	26.89	120.4	4.57	4.58	1478.
240	6.06	34.17	238	26.91	118.2	4.69	4.87	1478.
250	5.98	34.19	248	26.93	116.2	4.81	5.16	1478.
260	5.88	34.19	258	26.95	114.7	4.92	5.46	1478.
270	5.77	34.19	268	26.96	113.5	5.04	5.77	1477.
280	5.69	34.20	278	26.98	111.9	5.15	6.08	1477.
290	5.62	34.20	288	26.99	111.2	5.26	6.41	1477.
300	5.45	34.20	298	27.01	109.2	5.37	6.74	1477.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 9

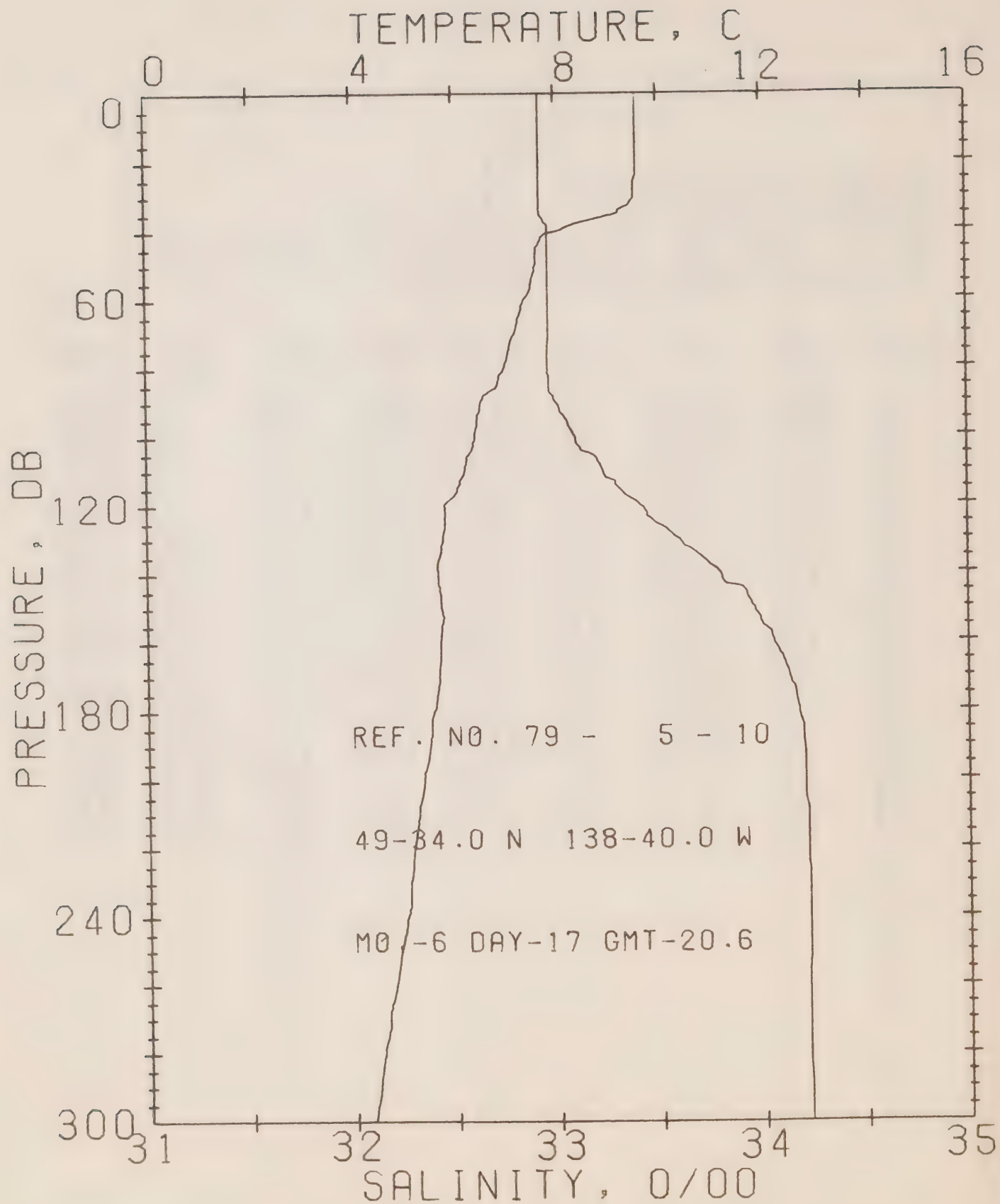
DATE 17/ 6/79

POSITION 49-26.0N, 136-40.0W GMT 13.3 STATION 9

RESULTS OF STP CAST 333 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.05	32.83	0	25.27	270.6	.00	.00	1488.
10	10.06	32.83	10	25.27	270.9	.27	.01	1488.
20	10.07	32.83	20	25.27	271.3	.54	.06	1488.
30	10.08	32.83	30	25.27	271.7	.81	.12	1488.
50	8.18	32.86	50	25.59	241.2	1.32	.33	1482.
75	7.53	32.87	75	25.69	231.8	1.91	.71	1480.
100	6.78	32.94	99	25.85	217.0	2.47	1.21	1477.
125	6.85	33.21	124	26.05	198.2	3.00	1.81	1478.
150	6.86	33.63	149	26.38	167.4	3.46	2.45	1479.
175	6.76	33.86	174	26.58	149.4	3.85	3.09	1479.
200	6.50	34.05	199	26.76	132.2	4.20	3.76	1479.
225	6.25	34.14	223	26.87	122.3	4.51	4.44	1479.
250	5.98	34.19	248	26.93	116.2	4.81	5.16	1478.
300	5.45	34.20	298	27.01	109.2	5.37	6.74	1477.
400	4.95	34.21	397	27.08	103.7	6.45	10.56	1476.
500	4.26	34.24	496	27.18	94.4	7.43	15.09	1475.
600	3.97	34.34	595	27.28	85.0	8.33	20.11	1476.
800	3.46	34.47	793	27.44	71.1	9.89	31.20	1477.
1000	3.00	34.55	990	27.55	61.4	11.21	43.29	1478.
1200	2.66	34.61	1188	27.63	54.5	12.37	56.25	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 10

DATE 17/ 6/79

POSITION 49-34.0N, 138-40.0W

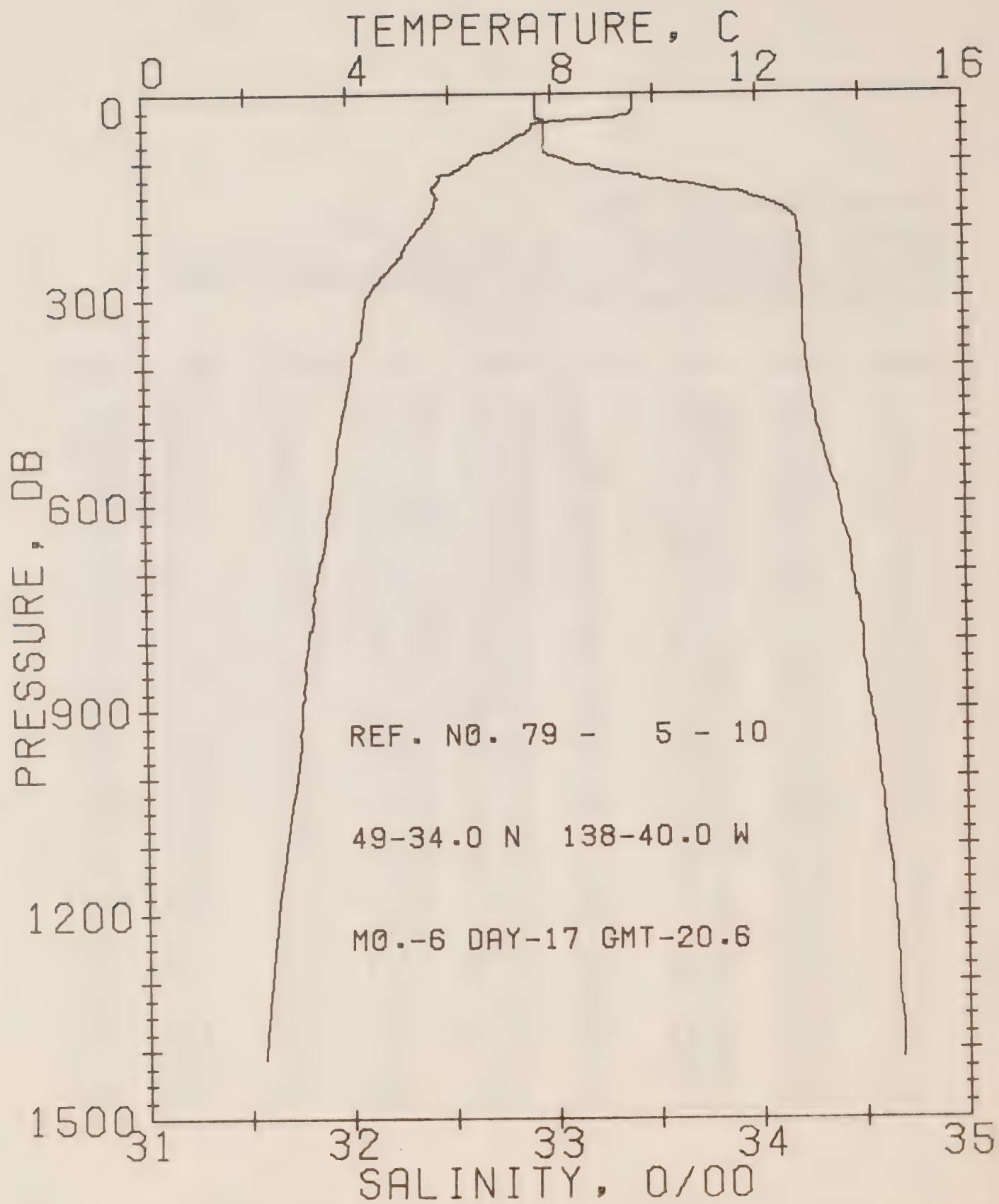
GMT 20.6

STATION 10

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.60	32.93	0	25.43	256.1	.00	.00	1486.
10	9.60	32.93	10	25.43	256.3	.26	.01	1486.
20	9.60	32.93	20	25.43	256.5	.51	.05	1487.
30	9.56	32.93	30	25.43	256.1	.77	.12	1487.
40	8.12	32.97	40	25.69	232.0	1.02	.21	1481.
50	7.63	32.97	50	25.76	225.4	1.24	.31	1480.
60	7.39	32.97	60	25.79	222.3	1.47	.43	1479.
70	7.20	32.97	70	25.82	219.9	1.69	.58	1478.
80	6.98	32.96	79	25.84	217.9	1.91	.75	1478.
90	6.53	33.00	89	25.93	209.3	2.12	.93	1476.
100	6.41	33.09	99	26.02	201.2	2.33	1.13	1476.
110	6.20	33.22	109	26.15	188.8	2.52	1.34	1475.
120	5.79	33.41	119	26.35	170.1	2.70	1.55	1474.
130	5.75	33.60	129	26.50	155.5	2.87	1.76	1474.
140	5.67	33.80	139	26.67	139.8	3.01	1.97	1474.
150	5.74	33.96	149	26.79	128.8	3.15	2.16	1475.
160	5.71	34.05	159	26.86	121.9	3.27	2.36	1475.
170	5.68	34.13	169	26.92	115.9	3.39	2.56	1475.
180	5.58	34.17	179	26.97	111.5	3.50	2.76	1475.
190	5.47	34.19	189	27.00	108.5	3.61	2.97	1475.
200	5.36	34.20	199	27.02	107.0	3.72	3.18	1475.
210	5.25	34.21	208	27.04	105.1	3.83	3.40	1474.
220	5.15	34.21	218	27.05	104.0	3.93	3.63	1474.
230	5.08	34.22	228	27.07	102.6	4.04	3.87	1474.
240	5.01	34.22	238	27.08	101.9	4.14	4.12	1474.
250	4.87	34.22	248	27.09	100.5	4.24	4.37	1474.
260	4.77	34.21	258	27.10	100.1	4.34	4.63	1473.
270	4.64	34.21	268	27.11	98.8	4.44	4.90	1473.
280	4.54	34.21	278	27.12	97.7	4.54	5.17	1473.
290	4.45	34.22	288	27.14	96.2	4.63	5.46	1472.
300	4.34	34.22	298	27.15	95.1	4.73	5.74	1472.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 10

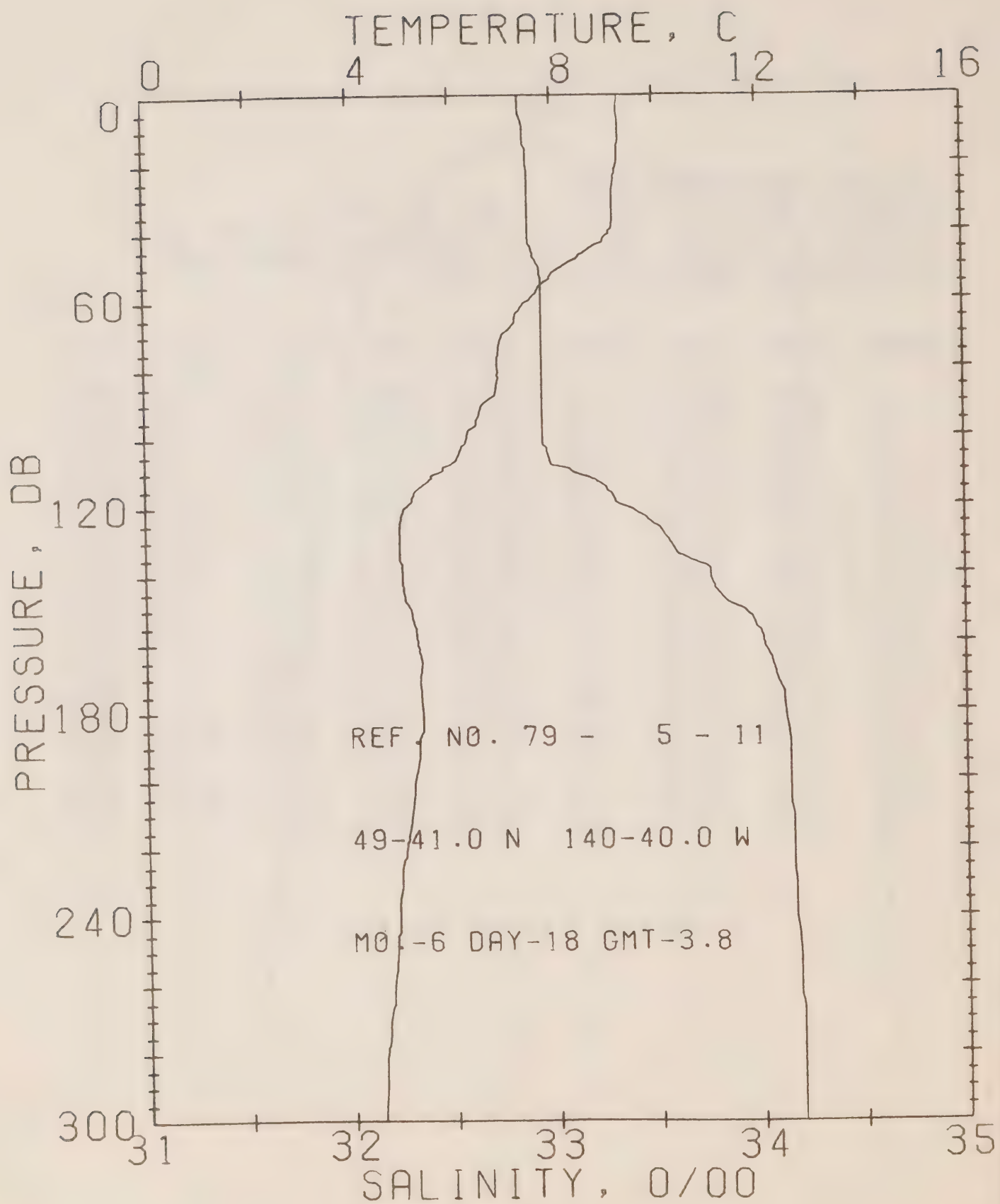
DATE 17/ 6/79

POSITION 49-34.0N, 138-40.0W GMT 20.6 STATION 10

RESULTS OF STP CAST 294 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.60	32.93	0	25.43	256.1	.00	.00	1486.
10	9.60	32.93	10	25.43	256.3	.26	.01	1486.
20	9.60	32.93	20	25.43	256.5	.51	.05	1487.
30	9.56	32.93	30	25.43	256.1	.77	.12	1487.
50	7.63	32.97	50	25.76	225.4	1.24	.31	1480.
75	7.07	32.96	75	25.83	218.9	1.80	.66	1478.
100	6.41	33.09	99	26.02	201.2	2.33	1.13	1476.
125	5.82	33.48	124	26.40	165.3	2.79	1.66	1474.
150	5.74	33.96	149	26.79	128.8	3.15	2.16	1475.
175	5.65	34.16	174	26.95	113.3	3.45	2.66	1475.
200	5.36	34.20	199	27.02	107.0	3.72	3.18	1475.
225	5.12	34.21	223	27.06	103.4	3.98	3.75	1474.
250	4.87	34.22	248	27.09	100.5	4.24	4.37	1474.
300	4.34	34.22	298	27.15	95.1	4.73	5.74	1472.
400	4.06	34.24	397	27.20	91.6	5.67	9.10	1473.
500	3.80	34.30	496	27.27	85.1	6.56	13.15	1473.
600	3.61	34.39	595	27.37	76.9	7.37	17.68	1474.
800	3.17	34.50	793	27.49	65.8	8.78	27.76	1476.
1000	2.93	34.58	990	27.58	58.8	10.03	39.19	1478.
1200	2.54	34.64	1188	27.66	50.7	11.12	51.37	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 11

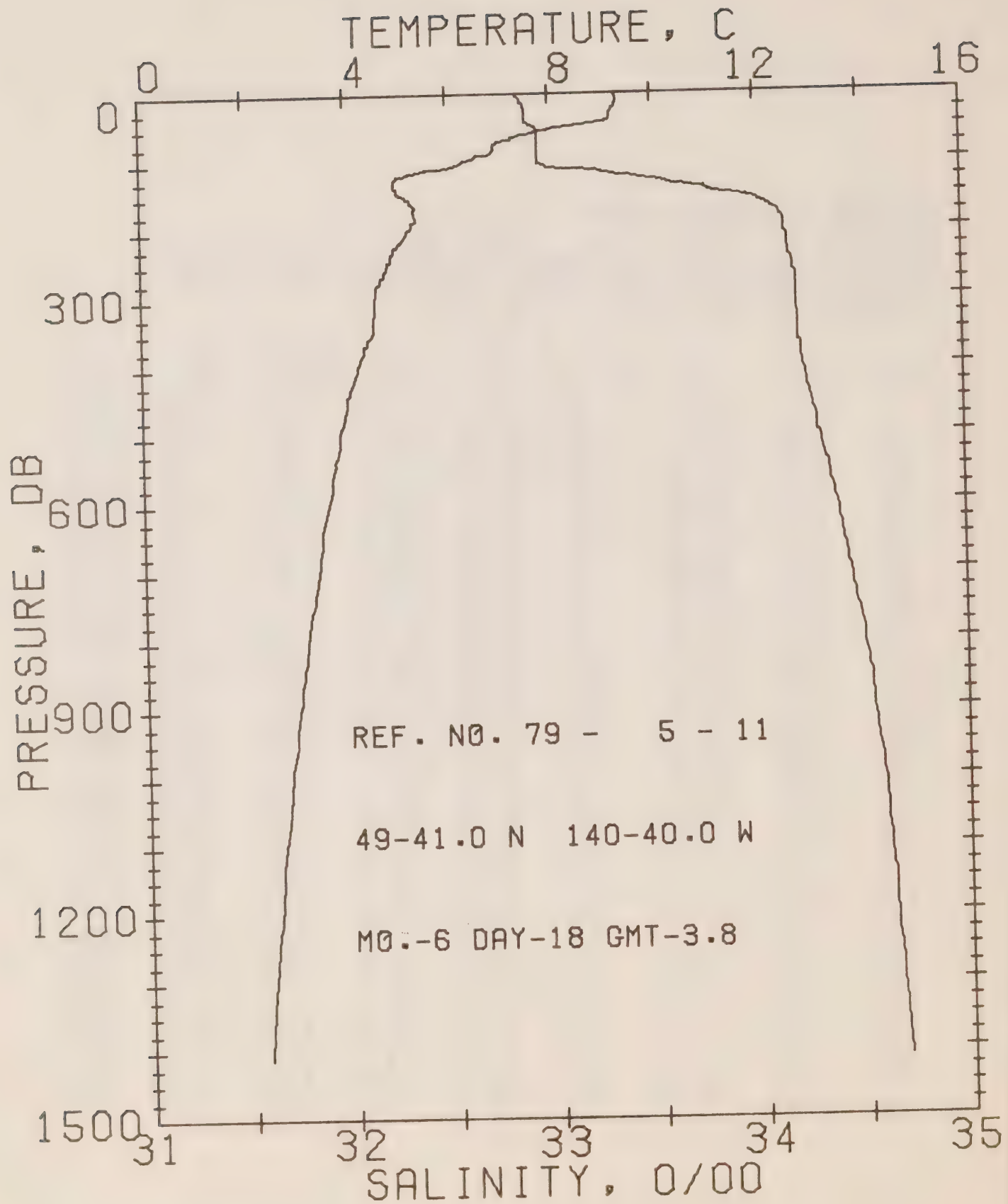
DATE 18/ 6/79

POSITION 49-41.0N, 140-40.0W GMT 3.8 STATION 11

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.32	32.85	0	25.41	257.8	.00	.00	1485.
10	9.32	32.87	10	25.42	256.5	.26	.01	1485.
20	9.30	32.88	20	25.44	255.6	.51	.05	1485.
30	9.21	32.89	30	25.46	253.6	.77	.12	1485.
40	9.13	32.89	40	25.47	252.6	1.02	.21	1485.
50	8.21	32.94	50	25.65	235.6	1.27	.32	1482.
60	7.54	32.95	60	25.75	225.8	1.50	.45	1479.
70	7.02	32.95	70	25.83	219.0	1.72	.60	1478.
80	6.93	32.95	79	25.84	218.0	1.94	.76	1477.
90	6.65	32.95	89	25.88	214.6	2.15	.95	1476.
100	6.30	32.95	99	25.92	210.3	2.37	1.16	1475.
110	5.81	33.09	109	26.09	194.1	2.57	1.38	1474.
120	5.11	33.34	119	26.37	167.5	2.75	1.58	1471.
130	4.96	33.56	129	26.56	149.5	2.91	1.78	1471.
140	5.02	33.76	139	26.71	135.3	3.05	1.98	1472.
150	5.18	33.92	149	26.82	125.3	3.18	2.17	1473.
160	5.30	34.02	159	26.89	119.3	3.30	2.37	1474.
170	5.34	34.08	169	26.93	115.4	3.42	2.56	1474.
180	5.37	34.12	179	26.96	113.0	3.53	2.77	1474.
190	5.32	34.14	189	26.98	110.9	3.65	2.98	1474.
200	5.22	34.14	199	26.99	109.8	3.76	3.20	1474.
210	5.15	34.15	208	27.01	108.4	3.87	3.43	1474.
220	5.03	34.15	218	27.02	107.1	3.97	3.66	1474.
230	4.93	34.16	228	27.04	105.4	4.08	3.91	1473.
240	4.87	34.16	238	27.05	104.8	4.18	4.16	1473.
250	4.82	34.18	248	27.07	103.0	4.29	4.42	1473.
260	4.76	34.18	258	27.07	102.3	4.39	4.68	1473.
270	4.69	34.19	268	27.09	100.8	4.49	4.96	1473.
280	4.60	34.19	278	27.10	100.0	4.59	5.24	1473.
290	4.58	34.19	288	27.10	99.8	4.69	5.53	1473.
300	4.56	34.19	298	27.11	99.7	4.79	5.83	1473.



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REFERENCE NO. 79- 5- 11

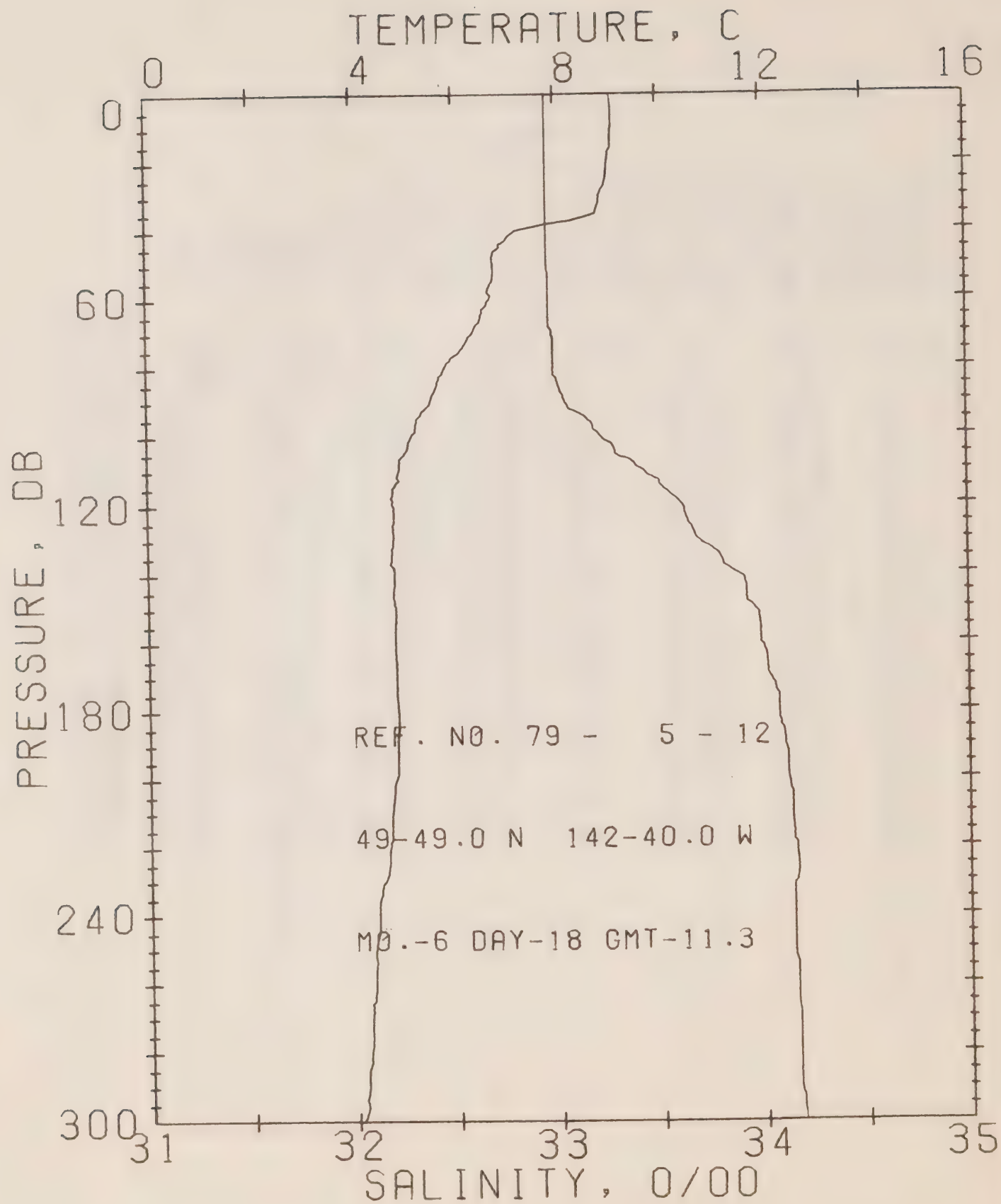
DATE 18/ 6/79

POSITION 49-41.0N, 140-40.0W GMT 3.8 STATION 11

RESULTS OF STP CAST 296 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.32	32.85	0	25.41	257.8	.00	.00	1485.
10	9.32	32.87	10	25.42	256.5	.26	.01	1485.
20	9.30	32.88	20	25.44	255.6	.51	.05	1485.
30	9.21	32.89	30	25.46	253.6	.77	.12	1485.
50	8.21	32.94	50	25.65	235.6	1.27	.32	1482.
75	6.94	32.95	75	25.84	218.0	1.83	.68	1477.
100	6.30	32.95	99	25.92	210.3	2.37	1.16	1475.
125	4.97	33.48	124	26.50	155.6	2.83	1.68	1471.
150	5.18	33.92	149	26.82	125.3	3.18	2.17	1473.
175	5.35	34.11	174	26.95	113.3	3.48	2.67	1474.
200	5.22	34.14	199	26.99	109.8	3.76	3.20	1474.
225	4.95	34.15	223	27.03	106.3	4.03	3.78	1473.
250	4.82	34.18	248	27.07	103.0	4.29	4.42	1473.
300	4.56	34.19	298	27.11	99.7	4.79	5.83	1473.
400	4.21	34.22	397	27.17	94.6	5.77	9.32	1473.
500	3.84	34.30	496	27.27	85.8	6.67	13.44	1473.
600	3.60	34.38	595	27.36	77.8	7.49	18.02	1474.
800	3.15	34.50	793	27.49	65.5	8.92	28.18	1476.
1000	2.80	34.59	990	27.59	56.8	10.14	39.35	1478.
1200	2.54	34.64	1188	27.66	51.3	11.22	51.39	1480.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 12

DATE 18/ 6/79

POSITION 49-49.0N, 142-40.0W

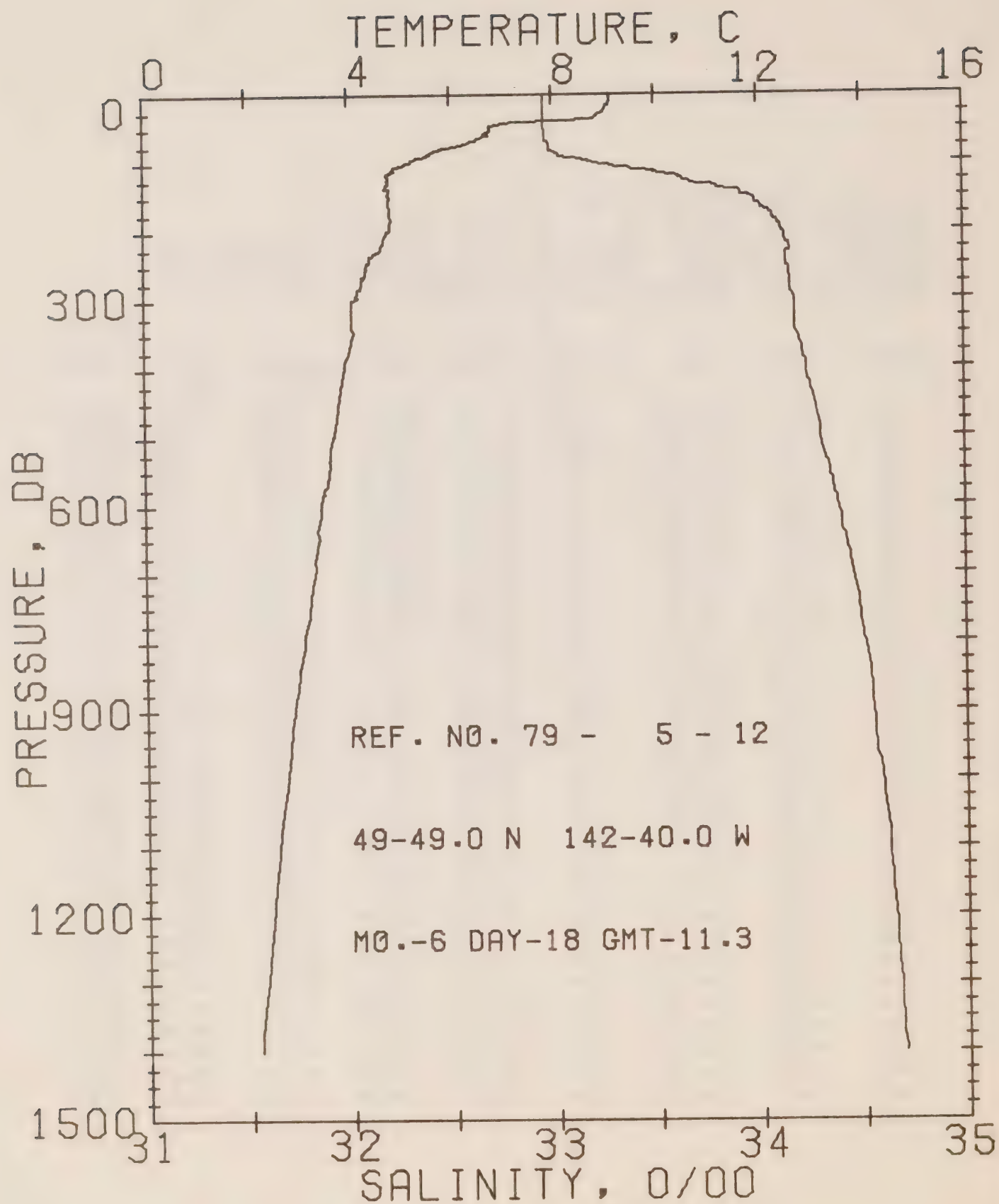
GMT 11.3

STATION 12

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.13	32.96	0	25.52	246.7	.00	.00	1485.
10	9.14	32.96	10	25.52	247.1	.25	.01	1485.
20	9.05	32.96	20	25.54	245.9	.49	.05	1485.
30	8.88	32.96	30	25.56	243.5	.74	.11	1484.
40	7.23	32.96	40	25.81	220.6	.98	.20	1478.
50	6.81	32.96	50	25.86	215.3	1.19	.30	1476.
60	6.72	32.97	60	25.88	213.6	1.41	.42	1476.
70	6.37	32.98	70	25.94	208.6	1.62	.56	1475.
80	5.82	32.99	79	26.01	201.4	1.82	.71	1473.
90	5.54	33.04	89	26.08	194.5	2.02	.88	1472.
100	5.15	33.21	99	26.26	177.5	2.21	1.06	1471.
110	4.90	33.43	109	26.47	158.4	2.37	1.24	1470.
120	4.78	33.61	119	26.62	143.7	2.53	1.42	1470.
130	4.79	33.69	129	26.68	137.9	2.67	1.60	1471.
140	4.80	33.88	139	26.83	123.9	2.80	1.78	1471.
150	4.83	33.96	149	26.89	118.4	2.92	1.96	1471.
160	4.80	33.99	159	26.92	115.9	3.03	2.14	1471.
170	4.83	34.03	169	26.95	113.4	3.15	2.33	1472.
180	4.85	34.07	179	26.98	110.6	3.26	2.53	1472.
190	4.82	34.10	189	27.01	108.2	3.37	2.74	1472.
200	4.81	34.11	199	27.02	107.1	3.48	2.95	1472.
210	4.70	34.13	208	27.04	104.9	3.58	3.17	1472.
220	4.66	34.15	218	27.06	102.9	3.69	3.40	1472.
230	4.55	34.15	228	27.07	101.9	3.79	3.64	1472.
240	4.43	34.14	238	27.08	101.4	3.89	3.88	1471.
250	4.35	34.14	248	27.09	100.6	3.99	4.13	1471.
260	4.34	34.15	258	27.10	99.9	4.09	4.39	1471.
270	4.28	34.16	268	27.11	98.6	4.19	4.66	1471.
280	4.24	34.16	278	27.12	98.3	4.29	4.94	1471.
290	4.20	34.16	288	27.12	97.9	4.39	5.22	1471.
300	4.09	34.18	298	27.15	95.4	4.48	5.51	1471.



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REFERENCE NO. 79- 5- 12

DATE 18/ 6/79

POSITION 49-49.0N, 142-40.0W

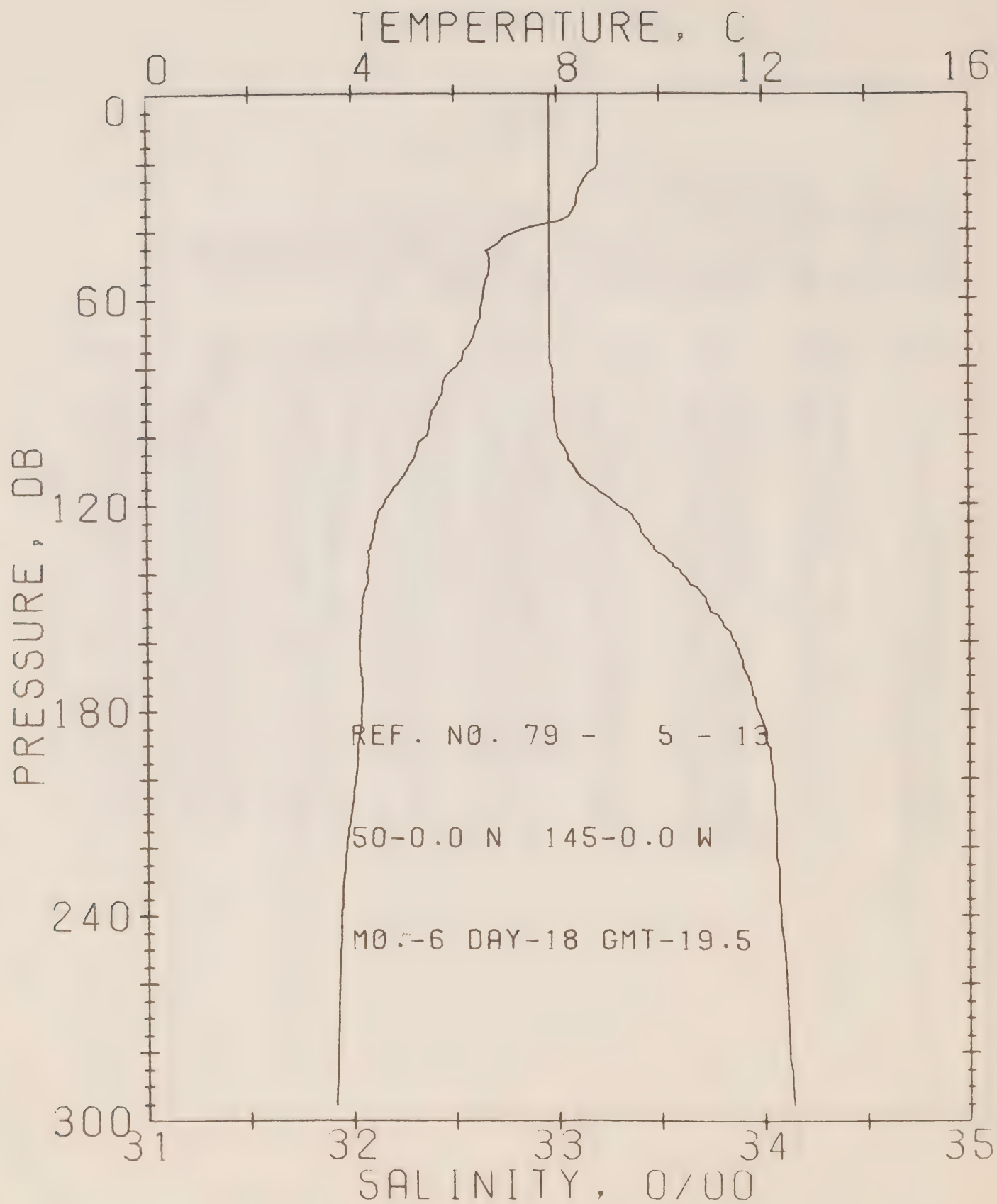
GMT 11.3

STATION 12

RESULTS OF STP CAST 295 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.13	32.96	0	25.52	246.7	.00	.00	1485.
10	9.14	32.96	10	25.52	247.1	.25	.01	1485.
20	9.05	32.96	20	25.54	245.9	.49	.05	1485.
30	8.88	32.96	30	25.56	243.5	.74	.11	1484.
50	6.81	32.96	50	25.86	215.3	1.19	.30	1476.
75	6.14	32.99	75	25.97	205.2	1.72	.63	1474.
100	5.15	33.21	99	26.26	177.5	2.21	1.06	1471.
125	4.80	33.64	124	26.64	141.7	2.60	1.51	1470.
150	4.83	33.96	149	26.89	118.4	2.92	1.96	1471.
175	4.84	34.07	174	26.98	110.5	3.20	2.43	1472.
200	4.81	34.11	199	27.02	107.1	3.48	2.95	1472.
225	4.63	34.16	223	27.07	102.0	3.74	3.52	1472.
250	4.35	34.14	248	27.09	100.6	3.99	4.13	1471.
300	4.09	34.18	298	27.15	95.4	4.48	5.51	1471.
400	3.90	34.23	397	27.21	90.5	5.42	8.86	1472.
500	3.67	34.30	496	27.29	83.7	6.29	12.84	1473.
600	3.45	34.39	595	27.38	75.7	7.09	17.30	1474.
800	3.08	34.51	793	27.51	64.3	8.49	27.23	1475.
1000	2.74	34.59	990	27.60	55.9	9.69	38.20	1477.
1200	2.44	34.65	1188	27.67	49.4	10.73	49.94	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 13

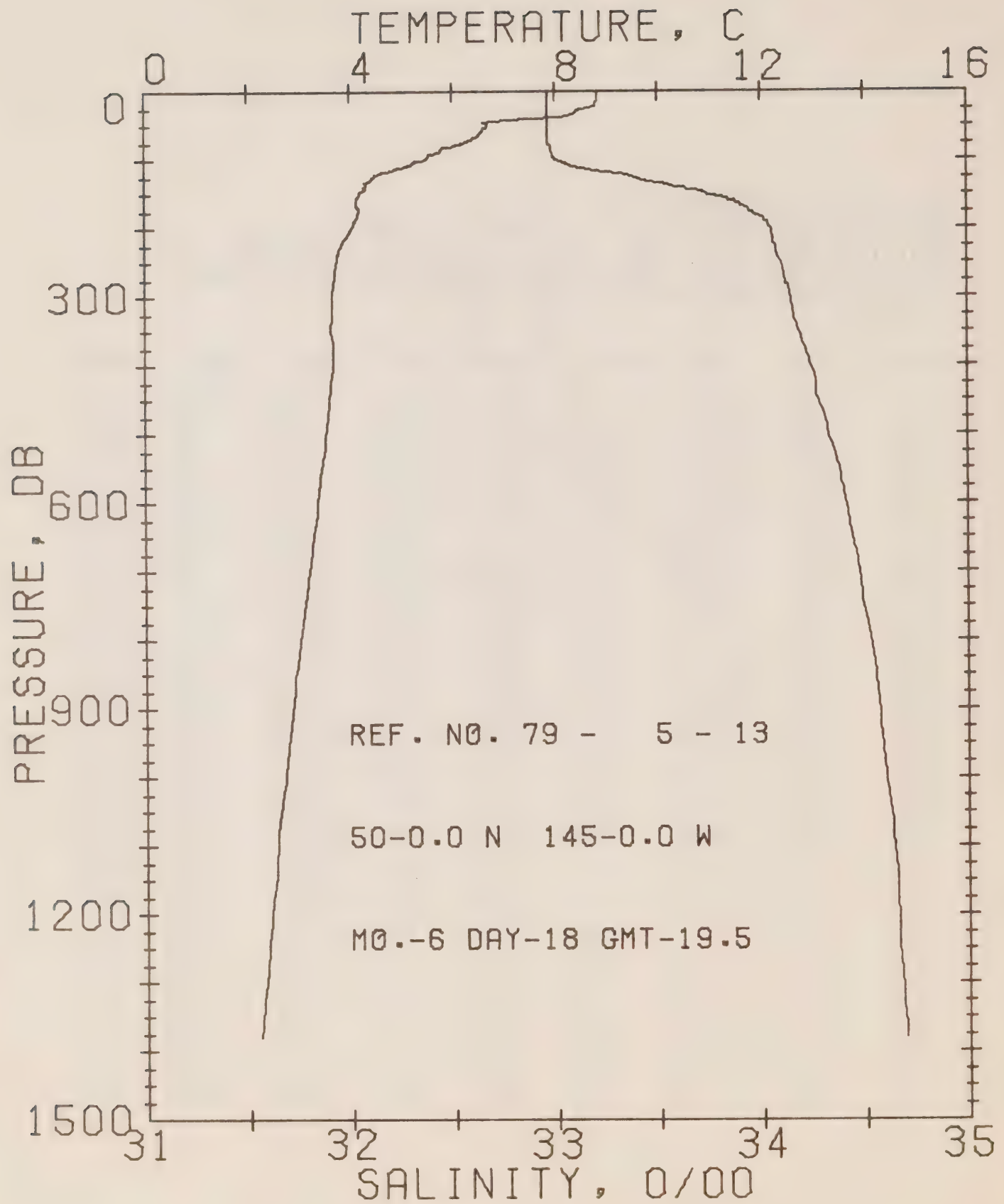
DATE 18/ 6/79

POSITION 50- .0N, 145- .0W GMT 19.5 STATION P

RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.82	32.97	0	25.58	241.4	.00	.00	1483.
10	8.83	32.97	10	25.58	241.7	.24	.01	1484.
20	8.80	32.97	20	25.58	241.5	.48	.05	1484.
30	8.40	32.97	30	25.65	235.8	.72	.11	1482.
40	7.30	32.97	40	25.80	220.7	.95	.19	1478.
50	6.70	32.97	50	25.88	213.2	1.17	.29	1476.
60	6.57	32.97	60	25.90	211.7	1.38	.41	1476.
70	6.38	32.97	70	25.93	209.5	1.59	.55	1475.
80	6.03	32.98	79	25.98	204.6	1.80	.71	1474.
90	5.68	32.99	89	26.03	199.8	2.00	.88	1473.
100	5.46	33.00	99	26.06	196.7	2.20	1.07	1472.
110	5.06	33.09	109	26.18	185.6	2.39	1.28	1471.
120	4.62	33.29	119	26.39	166.0	2.57	1.49	1469.
130	4.39	33.44	129	26.53	152.4	2.72	1.69	1469.
140	4.27	33.60	139	26.67	139.3	2.87	1.89	1468.
150	4.19	33.74	149	26.79	128.0	3.00	2.08	1468.
160	4.13	33.87	159	26.90	117.8	3.13	2.28	1468.
170	4.17	33.93	169	26.94	113.8	3.24	2.47	1469.
180	4.17	33.97	179	26.98	110.4	3.35	2.67	1469.
190	4.09	34.02	189	27.02	106.4	3.46	2.88	1469.
200	4.05	34.04	199	27.04	104.3	3.57	3.09	1469.
210	3.95	34.06	208	27.06	102.4	3.67	3.30	1469.
220	3.87	34.06	218	27.07	101.5	3.77	3.53	1469.
230	3.81	34.07	228	27.09	100.1	3.87	3.76	1469.
240	3.77	34.08	238	27.10	99.0	3.97	3.99	1469.
250	3.74	34.10	248	27.12	97.6	4.07	4.24	1469.
260	3.71	34.11	258	27.13	96.7	4.17	4.49	1469.
270	3.70	34.11	268	27.13	96.3	4.26	4.75	1469.
280	3.68	34.12	278	27.14	95.6	4.36	5.02	1469.
290	3.67	34.13	288	27.15	94.4	4.46	5.30	1469.
300	3.66	34.14	298	27.16	93.8	4.55	5.58	1469.



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REFERENCE NO. 79- 5- 13

DATE 18/ 6/79

POSITION 50- .0N, 145- .0W

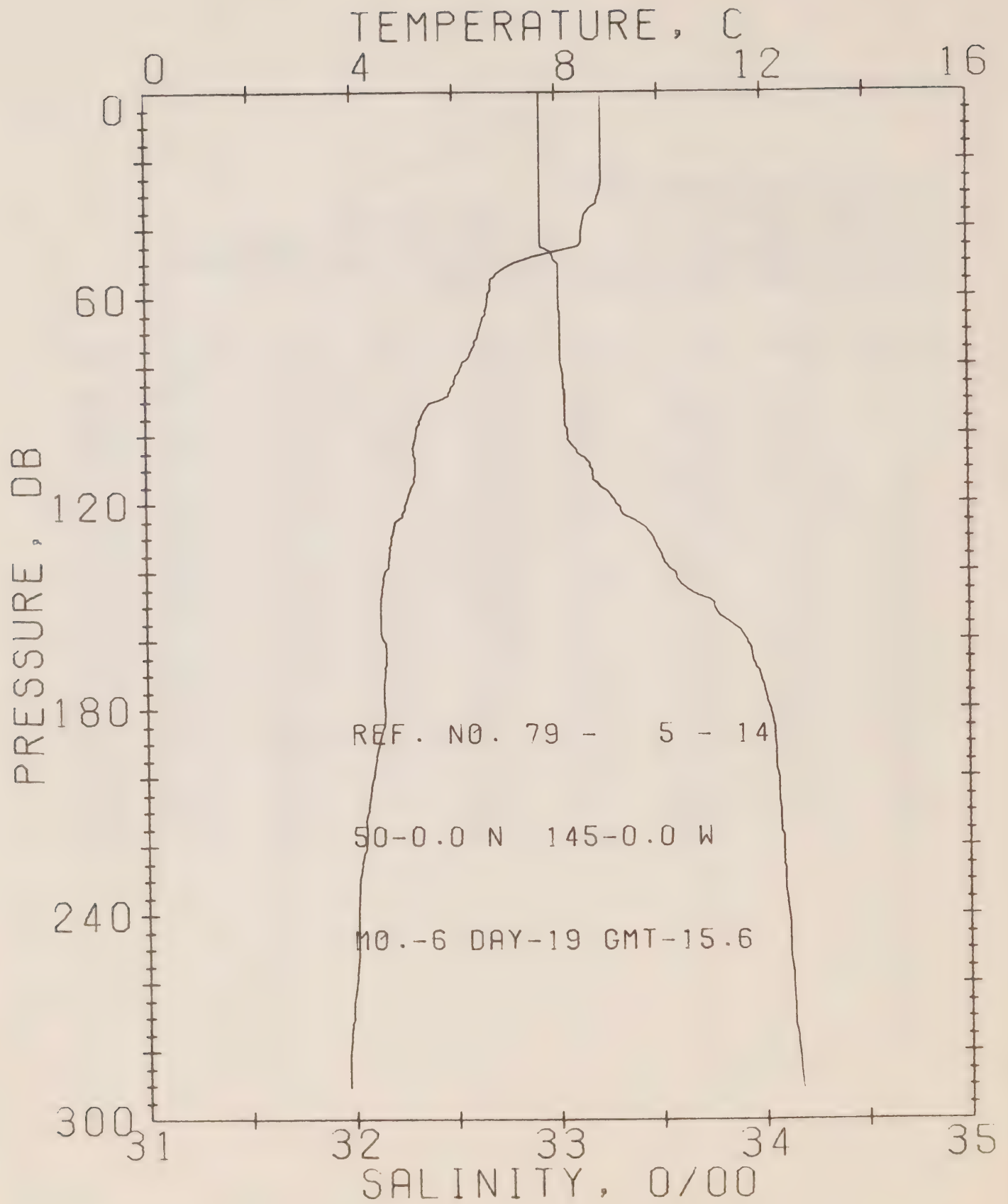
GMT 19.5

STATION P

RESULTS OF STP CAST 247 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.82	32.97	0	25.58	241.4	.00	.00	1483.
10	8.83	32.97	10	25.58	241.7	.24	.01	1484.
20	8.80	32.97	20	25.58	241.5	.48	.05	1484.
30	8.40	32.97	30	25.65	235.8	.72	.11	1482.
50	6.70	32.97	50	25.88	213.2	1.17	.29	1476.
75	6.20	32.97	75	25.95	207.3	1.70	.63	1474.
100	5.46	33.00	99	26.06	196.7	2.20	1.07	1472.
125	4.46	33.39	124	26.48	156.8	2.65	1.59	1469.
150	4.19	33.74	149	26.79	128.0	3.00	2.08	1468.
175	4.18	33.95	174	26.96	112.4	3.30	2.57	1469.
200	4.05	34.04	199	27.04	104.3	3.57	3.09	1469.
225	3.84	34.07	223	27.08	100.6	3.82	3.64	1469.
250	3.74	34.10	248	27.12	97.6	4.07	4.24	1469.
300	3.66	34.14	298	27.16	93.8	4.55	5.58	1469.
400	3.68	34.24	397	27.23	87.8	5.46	8.82	1471.
500	3.53	34.33	496	27.32	80.3	6.30	12.66	1472.
600	3.37	34.41	595	27.40	72.8	7.06	16.92	1473.
800	3.02	34.53	793	27.53	62.0	8.41	26.51	1475.
1000	2.72	34.60	990	27.61	54.8	9.57	37.15	1477.
1200	2.44	34.66	1188	27.68	48.6	10.59	48.59	1479.



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REFERENCE NO. 79- 5- 14

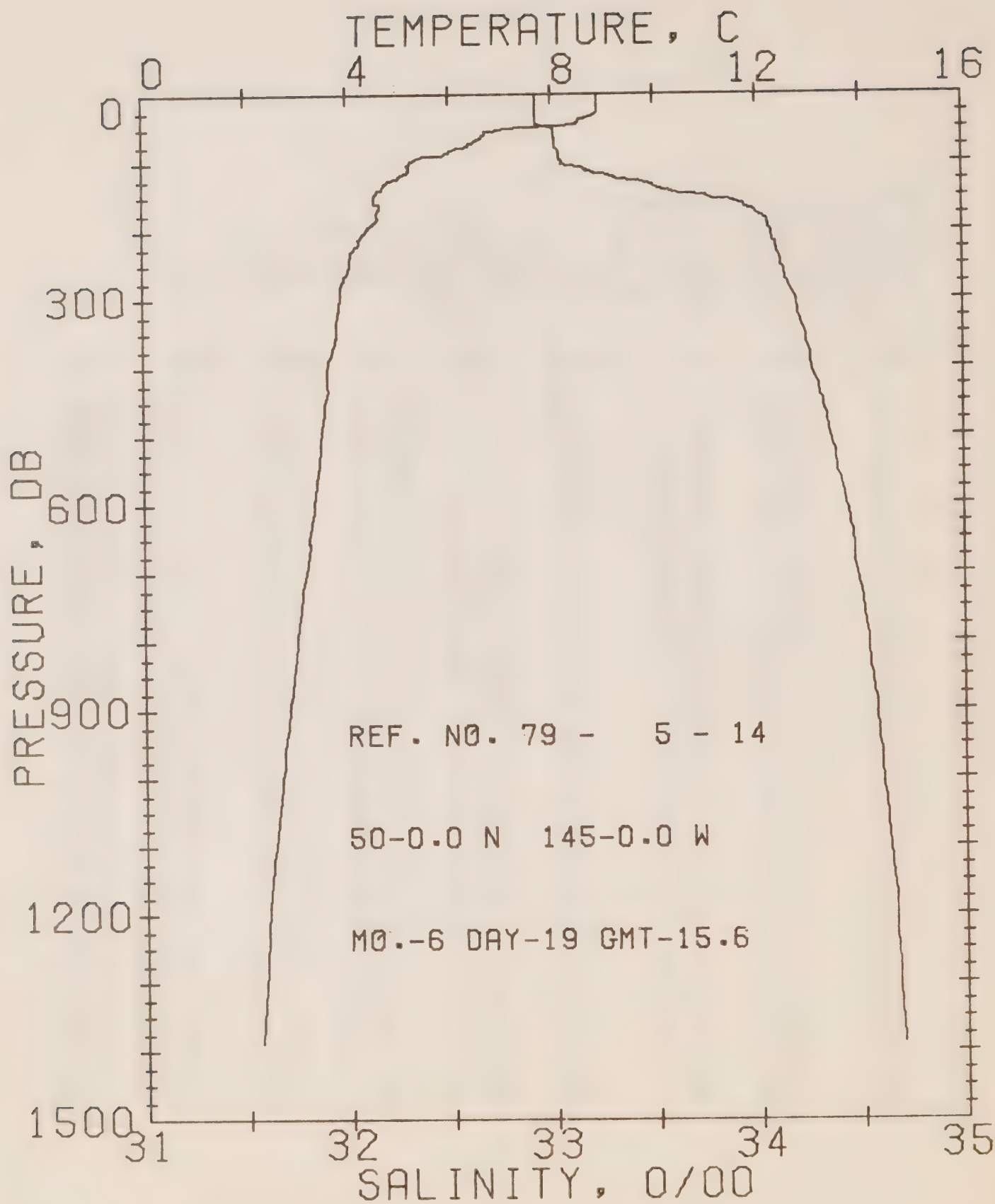
DATE 19/ 6/79

POSITION 50- .0N, 145- .0W GMT 15.6 STATION P

RESULTS OF STP CAST 150 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.92	32.93	0	25.53	245.8	.00	.00	1484.
10	8.91	32.93	10	25.54	245.8	.25	.01	1484.
20	8.90	32.93	20	25.54	245.9	.49	.05	1484.
30	8.86	32.93	30	25.54	245.5	.74	.11	1484.
40	8.53	32.93	40	25.59	240.8	.98	.20	1483.
50	7.18	33.01	50	25.85	216.4	1.21	.31	1478.
60	6.68	33.01	60	25.92	210.1	1.43	.42	1476.
70	6.49	33.02	70	25.95	207.0	1.63	.56	1476.
80	6.14	33.02	79	26.00	202.7	1.84	.72	1474.
90	5.69	33.04	89	26.07	196.2	2.04	.89	1473.
100	5.24	33.05	99	26.13	190.5	2.23	1.08	1471.
110	5.23	33.17	109	26.22	181.5	2.42	1.28	1471.
120	5.04	33.29	119	26.34	170.5	2.59	1.49	1471.
130	4.76	33.47	129	26.51	154.1	2.76	1.69	1470.
140	4.60	33.57	139	26.61	145.0	2.91	1.90	1470.
150	4.54	33.76	149	26.77	130.2	3.05	2.10	1470.
160	4.59	33.92	159	26.89	118.8	3.17	2.30	1470.
170	4.61	33.98	169	26.94	114.2	3.29	2.50	1471.
180	4.61	34.03	179	26.97	111.0	3.40	2.70	1471.
190	4.49	34.05	189	27.01	107.9	3.51	2.90	1471.
200	4.38	34.07	199	27.03	105.8	3.62	3.12	1470.
210	4.26	34.08	208	27.05	103.8	3.72	3.34	1470.
220	4.22	34.09	218	27.06	102.7	3.82	3.56	1470.
230	4.08	34.10	228	27.09	100.6	3.93	3.80	1470.
240	4.06	34.12	238	27.10	99.3	4.03	4.03	1470.
250	4.05	34.12	248	27.10	99.0	4.13	4.28	1470.
260	4.00	34.13	258	27.12	97.8	4.22	4.54	1470.
270	3.94	34.14	268	27.13	96.6	4.32	4.80	1470.
280	3.88	34.16	278	27.15	94.7	4.42	5.07	1470.
290	3.86	34.17	288	27.16	93.7	4.51	5.34	1470.
300	3.86	34.19	298	27.18	92.4	4.60	5.62	1470.



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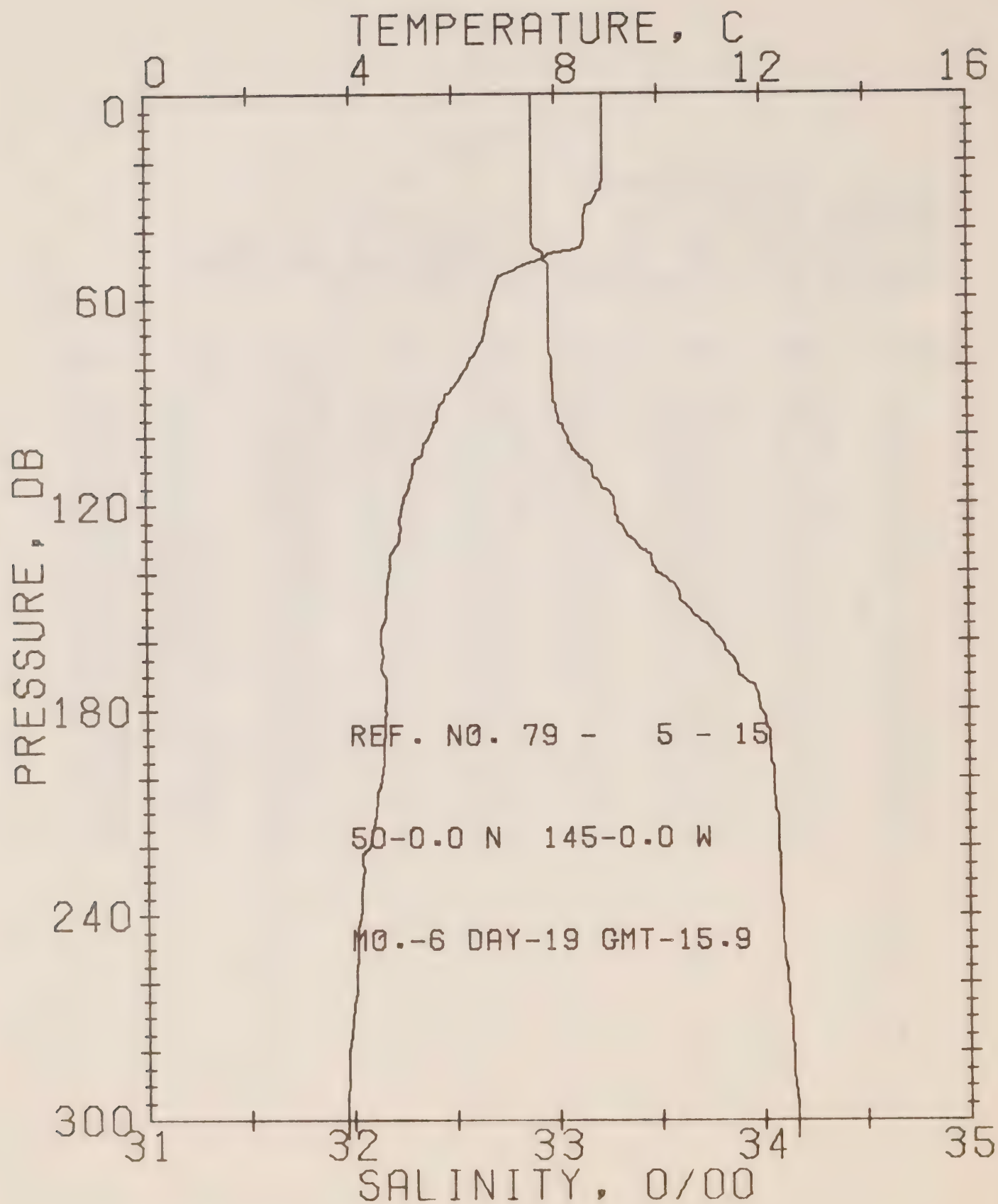
REFERENCE NO. 79- 5- 14 DATE 19/ 6/79

POSITION 50- .0N, 145- .0W GMT 15.6 STATION P

RESULTS OF STP CAST 253 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

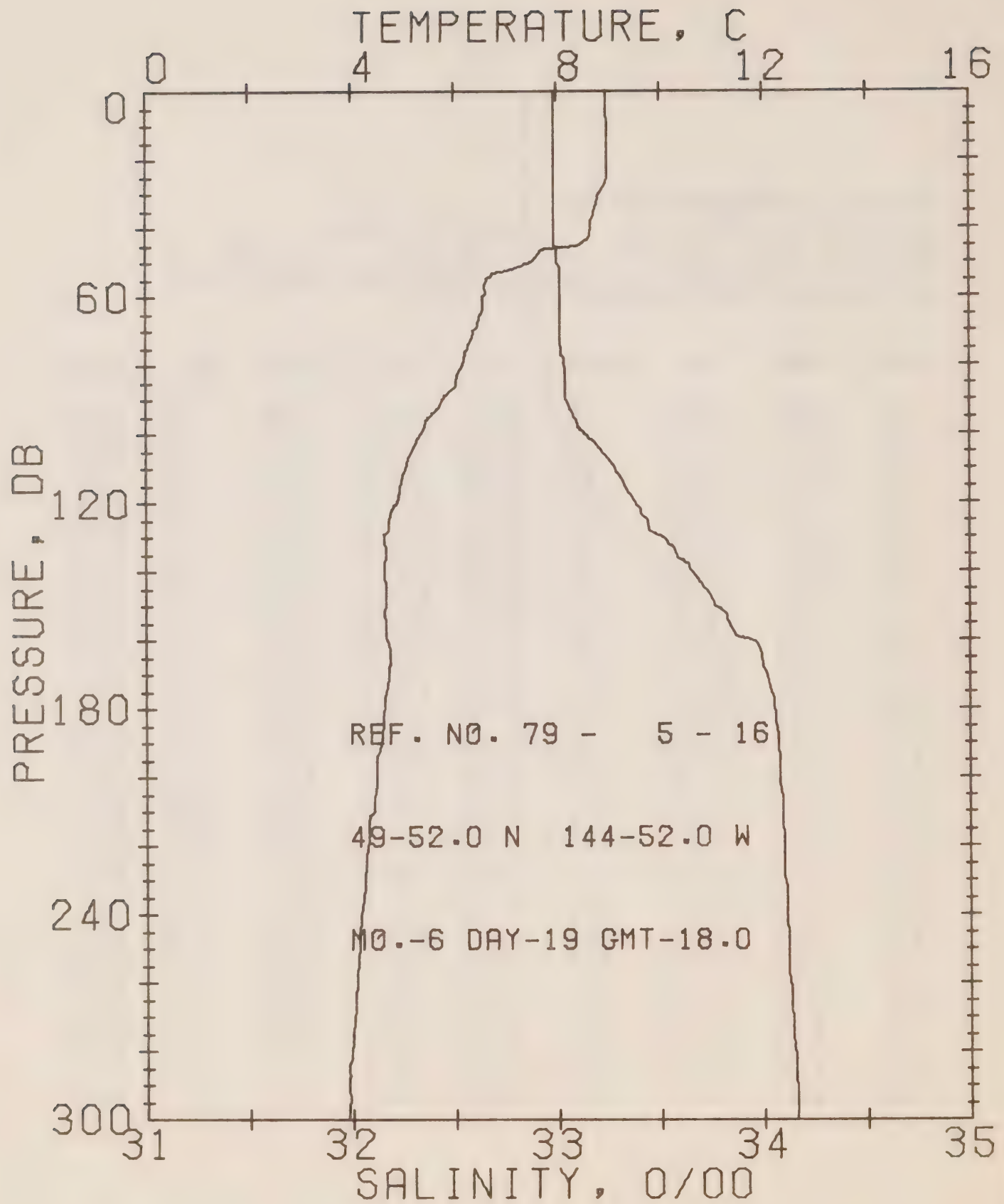
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.92	32.93	0	25.53	245.8	.00	.00	1484.
10	8.91	32.93	10	25.54	245.8	.25	.01	1484.
20	8.90	32.93	20	25.54	245.9	.49	.05	1484.
30	8.86	32.93	30	25.54	245.5	.74	.11	1484.
50	7.18	33.01	50	25.85	216.4	1.21	.31	1478.
75	6.35	33.02	75	25.97	205.4	1.74	.64	1475.
100	5.24	33.05	99	26.13	190.5	2.23	1.08	1471.
125	4.83	33.39	124	26.44	160.8	2.68	1.59	1470.
150	4.54	33.76	149	26.77	130.2	3.05	2.10	1470.
175	4.59	34.01	174	26.96	112.4	3.34	2.60	1471.
200	4.38	34.07	199	27.03	105.8	3.62	3.12	1470.
225	4.14	34.09	223	27.07	102.0	3.88	3.68	1470.
250	4.05	34.12	248	27.10	99.0	4.13	4.28	1470.
300	3.86	34.19	298	27.18	92.4	4.60	5.62	1470.
400	3.61	34.27	397	27.27	84.6	5.49	8.78	1471.
500	3.49	34.36	496	27.35	77.6	6.30	12.48	1472.
600	3.34	34.43	595	27.42	71.3	7.04	16.64	1473.
800	2.98	34.53	793	27.53	61.5	8.36	26.04	1475.
1000	2.68	34.60	990	27.62	54.4	9.52	36.62	1477.
1200	2.40	34.66	1188	27.69	48.0	10.54	48.01	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 15 DATE 19/ 6/79
 POSITION 50- .0N, 145- .0W GMT 15.9 STATION P
 RESULTS OF STP CAST 170 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.94	32.89	0	25.50	249.1	.00	.00	1484.
10	8.94	32.89	10	25.50	249.3	.25	.01	1484.
20	8.93	32.89	20	25.50	249.3	.50	.05	1484.
30	8.80	32.89	30	25.52	247.6	.75	.11	1484.
40	8.56	32.89	40	25.56	244.2	.99	.20	1483.
50	7.40	32.97	50	25.79	222.3	1.23	.31	1479.
60	6.75	32.97	60	25.88	213.9	1.45	.43	1476.
70	6.61	32.97	70	25.90	212.3	1.66	.57	1476.
80	6.28	32.98	79	25.95	207.6	1.87	.73	1475.
90	5.79	32.99	89	26.02	201.1	2.07	.91	1473.
100	5.53	33.05	99	26.09	193.7	2.27	1.10	1472.
110	5.19	33.17	109	26.23	181.0	2.46	1.30	1471.
120	5.00	33.28	119	26.34	170.5	2.63	1.51	1471.
130	4.93	33.37	129	26.42	163.4	2.80	1.72	1471.
140	4.73	33.49	139	26.53	152.3	2.96	1.94	1470.
150	4.67	33.63	149	26.65	141.3	3.10	2.15	1470.
160	4.55	33.80	159	26.80	127.4	3.24	2.36	1470.
170	4.65	33.89	169	26.86	121.8	3.36	2.57	1471.
180	4.65	33.99	179	26.94	114.4	3.48	2.78	1471.
190	4.62	34.03	189	26.97	111.1	3.59	2.99	1471.
200	4.57	34.05	199	26.99	109.3	3.70	3.21	1471.
210	4.46	34.07	208	27.02	107.1	3.81	3.44	1471.
220	4.32	34.07	218	27.04	105.3	3.92	3.67	1471.
230	4.19	34.06	228	27.06	103.3	4.02	3.91	1470.
240	4.13	34.09	238	27.07	102.0	4.12	4.15	1470.
250	4.08	34.10	248	27.08	101.1	4.22	4.41	1470.
260	4.05	34.11	258	27.10	99.4	4.32	4.67	1470.
270	3.99	34.13	268	27.12	97.9	4.42	4.93	1470.
280	3.90	34.14	278	27.14	96.2	4.52	5.21	1470.
290	3.89	34.15	288	27.14	95.6	4.62	5.49	1470.
300	3.87	34.16	298	27.15	94.6	4.71	5.77	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 16

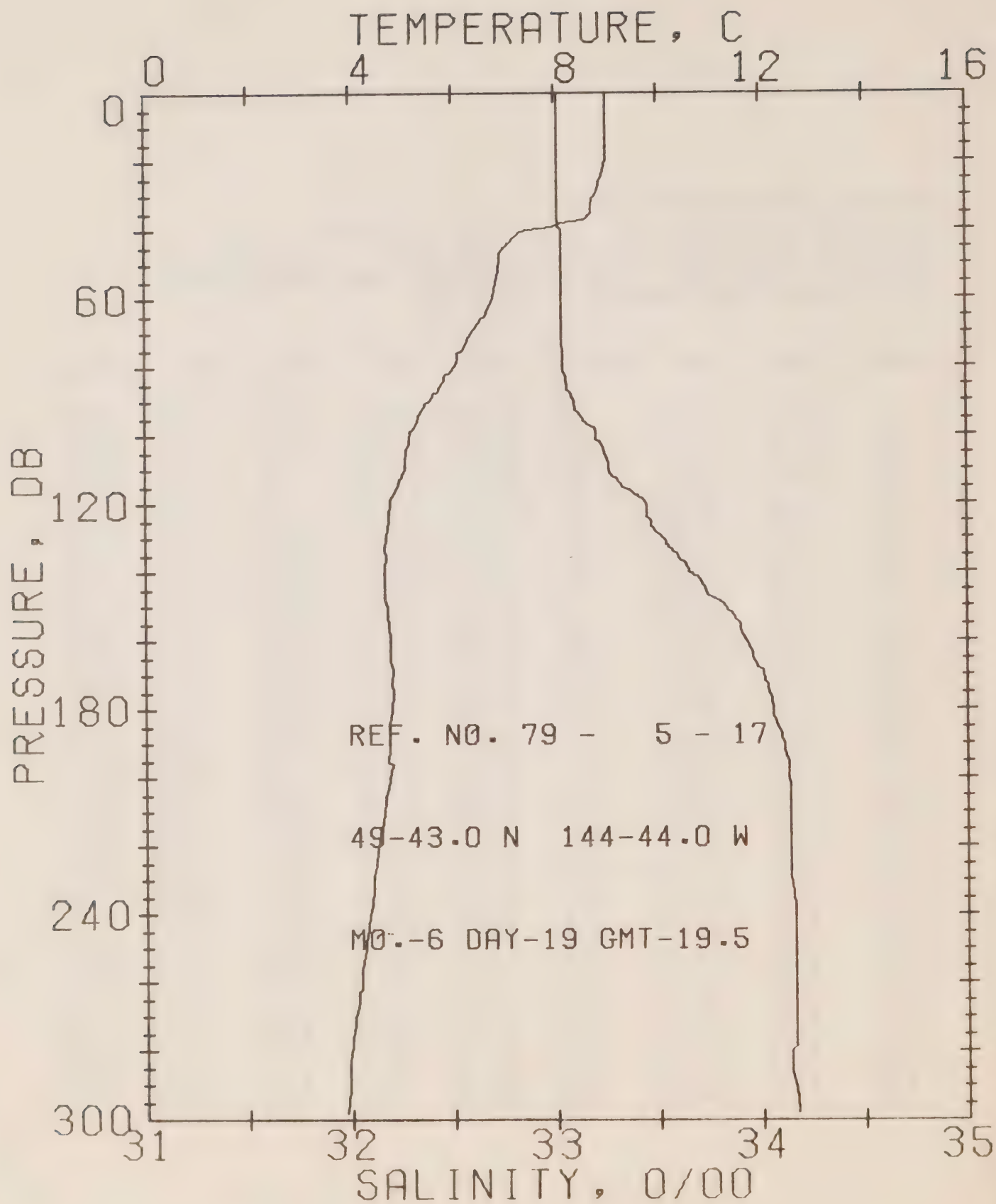
DATE 19/ 6/79

POSITION 49-52.0N, 144-52.0W GMT 18.0 STATION E3

RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.97	32.99	0	25.57	242.1	.00	.00	1484.
10	8.98	32.99	10	25.57	242.5	.24	.01	1484.
20	8.99	32.99	20	25.57	242.7	.48	.05	1484.
30	8.83	32.99	30	25.60	240.6	.73	.11	1484.
40	8.66	32.99	40	25.62	238.2	.97	.20	1483.
50	7.49	33.00	50	25.80	221.2	1.20	.30	1479.
60	6.57	33.01	60	25.93	208.7	1.41	.42	1476.
70	6.38	33.01	70	25.96	206.5	1.62	.56	1475.
80	6.16	33.03	79	26.00	202.4	1.82	.71	1474.
90	5.77	33.04	89	26.06	197.2	2.02	.89	1473.
100	5.33	33.13	99	26.18	185.5	2.21	1.07	1472.
110	5.03	33.28	109	26.33	171.0	2.39	1.26	1471.
120	4.88	33.38	119	26.43	162.0	2.56	1.46	1470.
130	4.65	33.51	129	26.56	149.9	2.71	1.66	1470.
140	4.64	33.65	139	26.67	139.2	2.86	1.86	1470.
150	4.66	33.77	149	26.76	130.7	2.99	2.06	1470.
160	4.69	33.94	159	26.89	118.4	3.12	2.25	1471.
170	4.71	34.02	169	26.95	112.8	3.23	2.45	1471.
180	4.62	34.05	179	26.99	109.3	3.34	2.65	1471.
190	4.57	34.07	189	27.01	107.7	3.45	2.85	1471.
200	4.48	34.08	199	27.03	106.0	3.56	3.06	1471.
210	4.42	34.09	208	27.04	104.8	3.66	3.28	1471.
220	4.30	34.10	218	27.06	102.9	3.77	3.51	1471.
230	4.24	34.10	228	27.07	102.0	3.87	3.74	1470.
240	4.16	34.11	238	27.08	100.8	3.97	3.99	1470.
250	4.12	34.12	248	27.10	99.7	4.07	4.24	1470.
260	4.08	34.13	258	27.11	98.9	4.17	4.49	1470.
270	4.03	34.14	268	27.12	97.6	4.27	4.76	1470.
280	3.98	34.15	278	27.13	96.5	4.37	5.03	1470.
290	3.92	34.16	288	27.15	95.3	4.46	5.31	1470.
300	3.93	34.16	298	27.15	95.2	4.56	5.60	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 17

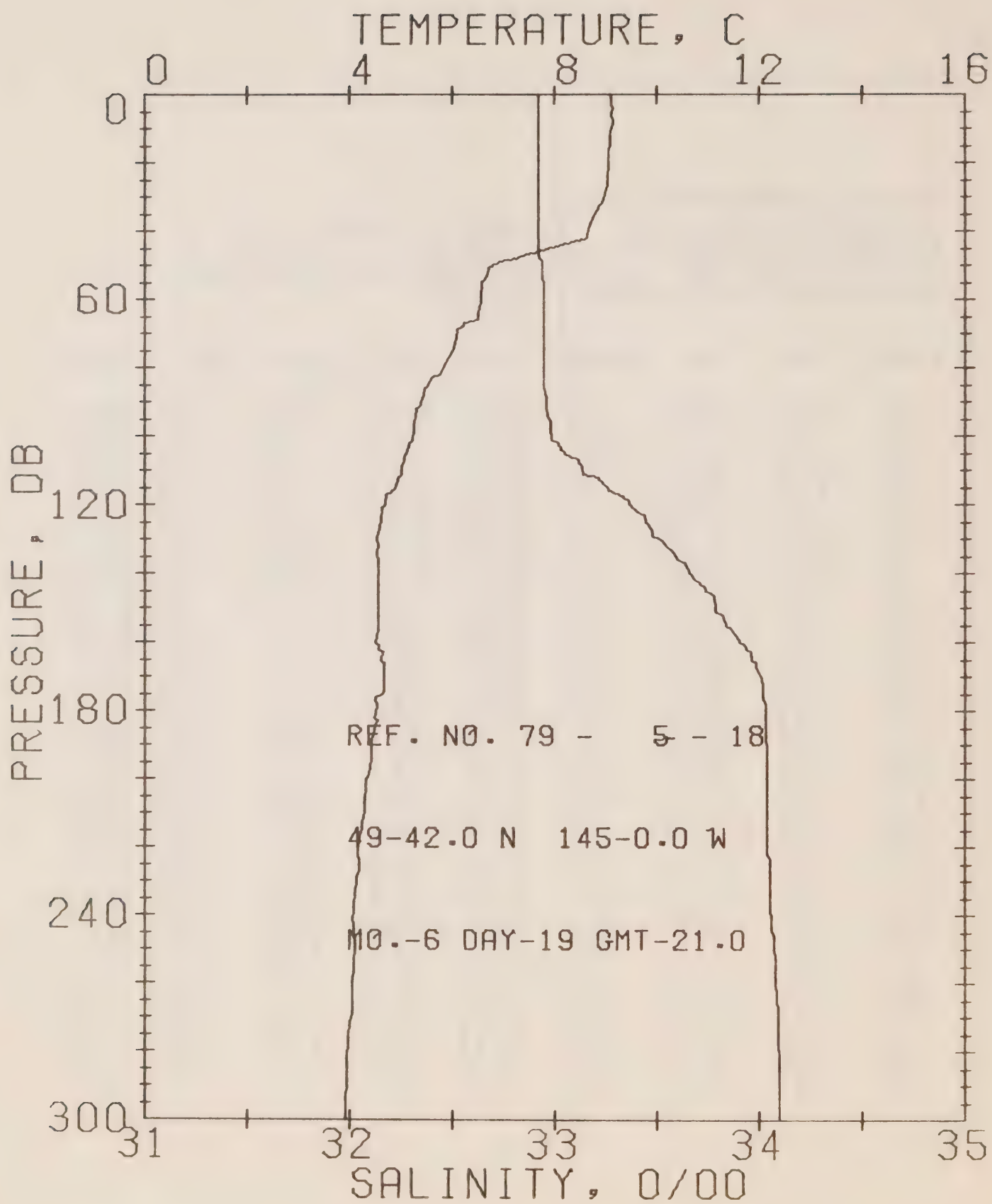
DATE 19/ 6/79

POSITION 49-43.0N, 144-44.0W GMT 19.5 STATION E4

RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.01	33.01	0	25.58	241.2	.00	.00	1484.
10	9.00	33.01	10	25.58	241.3	.24	.01	1484.
20	9.00	33.01	20	25.58	241.4	.48	.05	1484.
30	8.79	33.01	30	25.62	238.5	.72	.11	1484.
40	7.43	33.03	40	25.83	218.1	.96	.19	1479.
50	6.92	33.03	50	25.90	211.5	1.17	.29	1477.
60	6.79	33.03	60	25.92	210.0	1.38	.41	1477.
70	6.38	33.03	70	25.97	205.0	1.59	.55	1475.
80	6.02	33.04	79	26.03	200.0	1.79	.70	1474.
90	5.54	33.09	89	26.12	190.8	1.99	.87	1472.
100	5.16	33.20	99	26.26	178.3	2.17	1.05	1471.
110	5.06	33.26	109	26.31	172.9	2.35	1.24	1471.
120	4.77	33.44	119	26.49	156.3	2.51	1.43	1470.
130	4.70	33.52	129	26.56	149.7	2.67	1.63	1470.
140	4.67	33.65	139	26.67	139.7	2.81	1.83	1470.
150	4.72	33.83	149	26.80	126.9	2.94	2.02	1471.
160	4.77	33.93	159	26.88	120.0	3.07	2.22	1471.
170	4.82	34.01	169	26.94	114.4	3.18	2.42	1472.
180	4.81	34.06	179	26.97	111.0	3.30	2.62	1472.
190	4.74	34.11	189	27.02	106.6	3.41	2.82	1472.
200	4.75	34.13	199	27.04	105.3	3.51	3.03	1472.
210	4.65	34.14	208	27.06	103.5	3.62	3.25	1472.
220	4.52	34.14	218	27.07	102.2	3.72	3.47	1471.
230	4.44	34.14	228	27.08	101.3	3.82	3.71	1471.
240	4.34	34.16	238	27.11	99.0	3.92	3.95	1471.
250	4.27	34.16	248	27.11	98.3	4.02	4.19	1471.
260	4.19	34.16	258	27.12	97.5	4.12	4.45	1471.
270	4.06	34.16	268	27.13	96.3	4.21	4.71	1470.
280	3.98	34.14	278	27.13	97.0	4.31	4.98	1470.
290	3.95	34.16	288	27.14	95.6	4.41	5.26	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 18

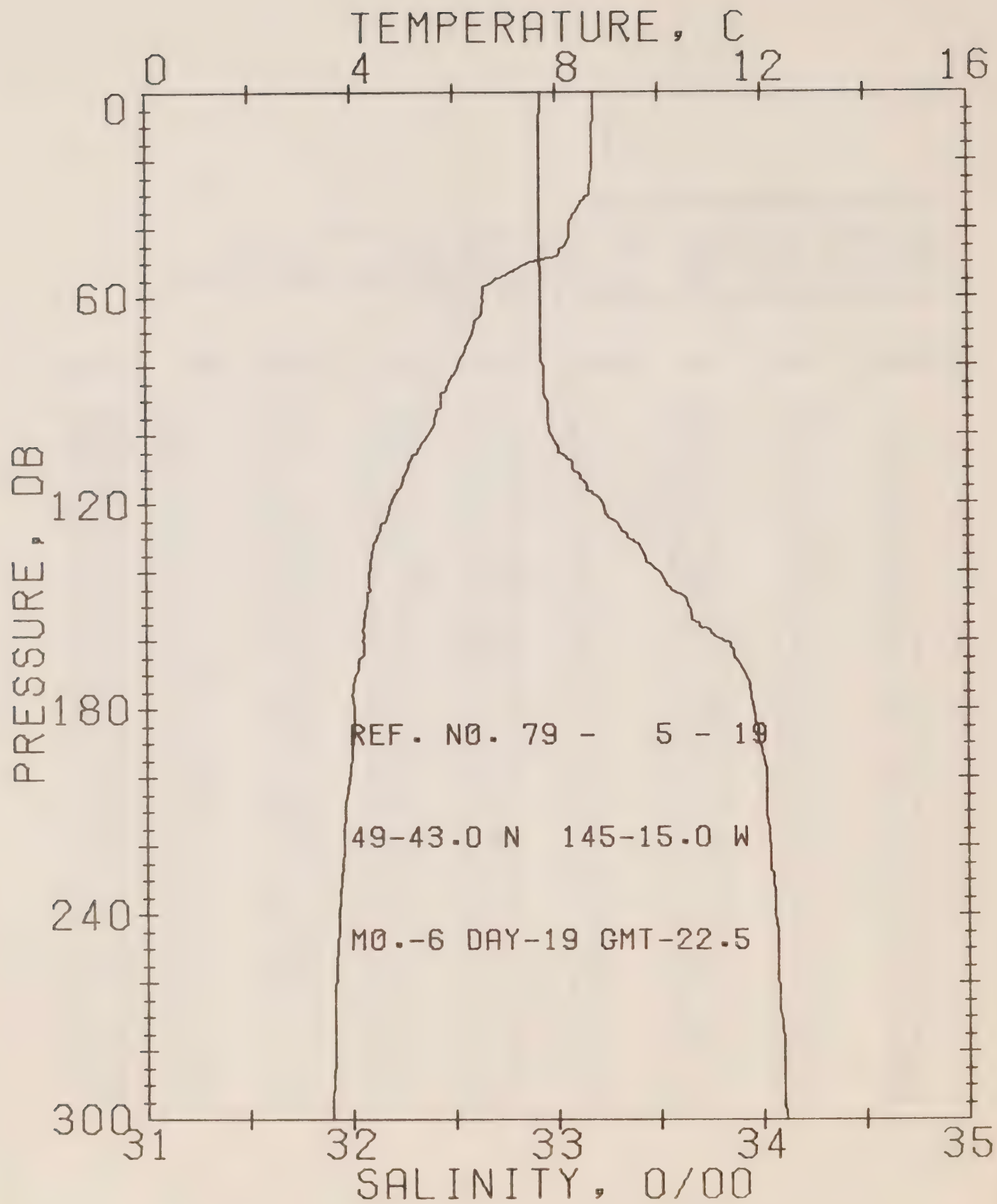
DATE 19/ 6/79

POSITION 49-42.0N, 145- .0W GMT 21.0 STATION C1

RESULTS OF STP CAST 172 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.10	32.92	0	25.50	249.3	.00	.00	1484.
10	9.11	32.92	10	25.50	249.6	.25	.01	1485.
20	9.06	32.92	20	25.50	249.1	.50	.05	1485.
30	8.98	32.92	30	25.52	247.9	.75	.11	1484.
40	8.66	32.92	40	25.57	243.5	.99	.20	1483.
50	6.80	32.94	50	25.85	216.7	1.23	.31	1476.
60	6.55	32.95	60	25.89	212.9	1.44	.43	1476.
70	6.10	32.95	70	25.95	207.5	1.65	.57	1474.
80	5.84	32.95	79	25.98	204.5	1.86	.73	1473.
90	5.39	32.96	89	26.04	198.8	2.06	.90	1471.
100	5.23	32.99	99	26.08	194.8	2.25	1.09	1471.
110	5.02	33.13	109	26.22	182.1	2.44	1.29	1470.
120	4.69	33.37	119	26.44	160.7	2.61	1.49	1470.
130	4.53	33.51	129	26.57	148.6	2.77	1.69	1469.
140	4.55	33.66	139	26.69	137.7	2.91	1.88	1470.
150	4.57	33.79	149	26.79	128.3	3.04	2.08	1470.
160	4.52	33.91	159	26.89	118.8	3.17	2.27	1470.
170	4.68	34.01	169	26.95	113.5	3.28	2.47	1471.
180	4.52	34.03	179	26.98	110.0	3.39	2.67	1471.
190	4.44	34.03	189	27.00	108.9	3.50	2.87	1471.
200	4.33	34.04	199	27.01	107.5	3.61	3.09	1470.
210	4.29	34.04	208	27.02	107.1	3.72	3.31	1470.
220	4.17	34.04	218	27.03	106.0	3.82	3.55	1470.
230	4.13	34.05	228	27.04	104.9	3.93	3.79	1470.
240	4.06	34.05	238	27.05	103.9	4.04	4.04	1470.
250	4.11	34.07	248	27.06	103.4	4.14	4.30	1470.
260	4.04	34.08	258	27.07	101.9	4.24	4.56	1470.
270	4.02	34.09	268	27.08	101.1	4.34	4.84	1470.
280	3.96	34.10	278	27.09	100.2	4.44	5.12	1470.
290	3.94	34.10	288	27.10	99.7	4.54	5.41	1470.
300	3.92	34.10	298	27.10	99.6	4.64	5.71	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 19

DATE 19/ 6/79

POSITION 49-43.0N, 145-15.0W

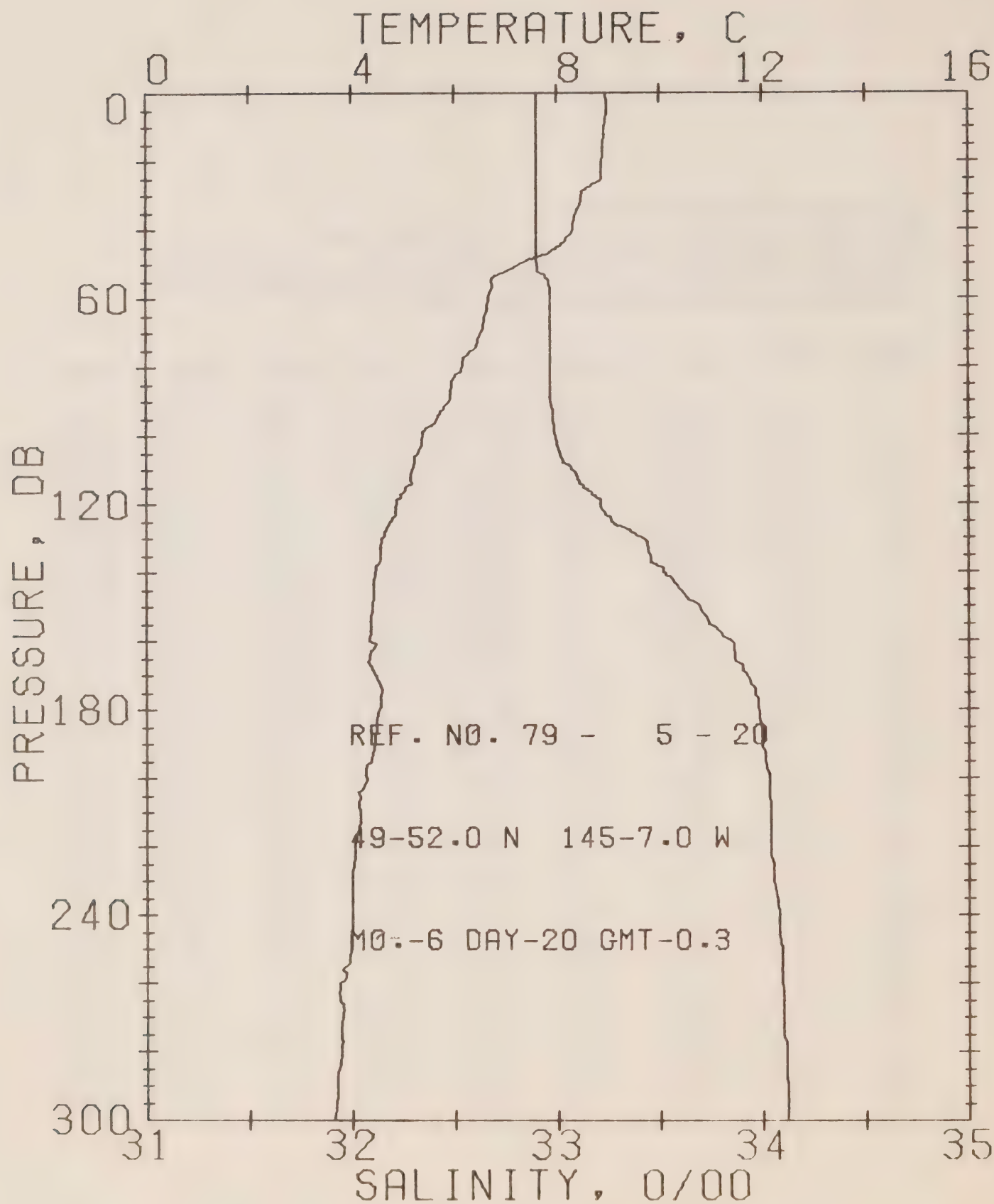
GMT 22.5

STATION W4

RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.76	32.93	0	25.56	243.5	.00	.00	1483.
10	8.73	32.92	10	25.56	244.0	.24	.01	1483.
20	8.71	32.92	20	25.56	243.8	.49	.05	1483.
30	8.66	32.92	30	25.57	243.3	.73	.11	1483.
40	8.26	32.92	40	25.63	237.7	.97	.20	1482.
50	7.45	32.92	50	25.74	226.7	1.21	.31	1479.
60	6.56	32.93	60	25.87	214.5	1.42	.43	1476.
70	6.38	32.93	70	25.89	212.4	1.64	.57	1475.
80	6.07	32.94	79	25.94	208.1	1.85	.73	1474.
90	5.76	32.95	89	25.99	203.4	2.06	.91	1473.
100	5.49	32.98	99	26.04	198.5	2.26	1.10	1472.
110	5.10	33.08	109	26.17	186.8	2.45	1.31	1471.
120	4.78	33.22	119	26.31	172.9	2.63	1.52	1470.
130	4.50	33.35	129	26.45	160.3	2.80	1.73	1469.
140	4.36	33.49	139	26.58	148.2	2.95	1.94	1469.
150	4.30	33.64	149	26.70	136.7	3.09	2.15	1469.
160	4.21	33.81	159	26.84	123.1	3.22	2.36	1469.
170	4.09	33.92	169	26.94	113.7	3.34	2.56	1469.
180	4.04	33.96	179	26.98	110.3	3.45	2.76	1469.
190	4.02	33.99	189	27.00	108.2	3.56	2.97	1469.
200	3.94	34.02	199	27.04	104.9	3.67	3.18	1469.
210	3.87	34.02	208	27.04	104.3	3.77	3.40	1468.
220	3.83	34.04	218	27.06	102.8	3.88	3.62	1468.
230	3.78	34.05	228	27.08	101.2	3.98	3.86	1468.
240	3.74	34.06	238	27.09	100.3	4.08	4.10	1468.
250	3.72	34.07	248	27.10	99.3	4.18	4.35	1468.
260	3.68	34.07	258	27.11	98.6	4.28	4.60	1468.
270	3.65	34.09	268	27.12	97.6	4.38	4.87	1469.
280	3.65	34.10	278	27.13	96.7	4.47	5.14	1469.
290	3.62	34.10	288	27.13	96.4	4.57	5.42	1469.
300	3.60	34.11	298	27.14	95.6	4.67	5.71	1469.



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REFERENCE NO. 79- 5- 20

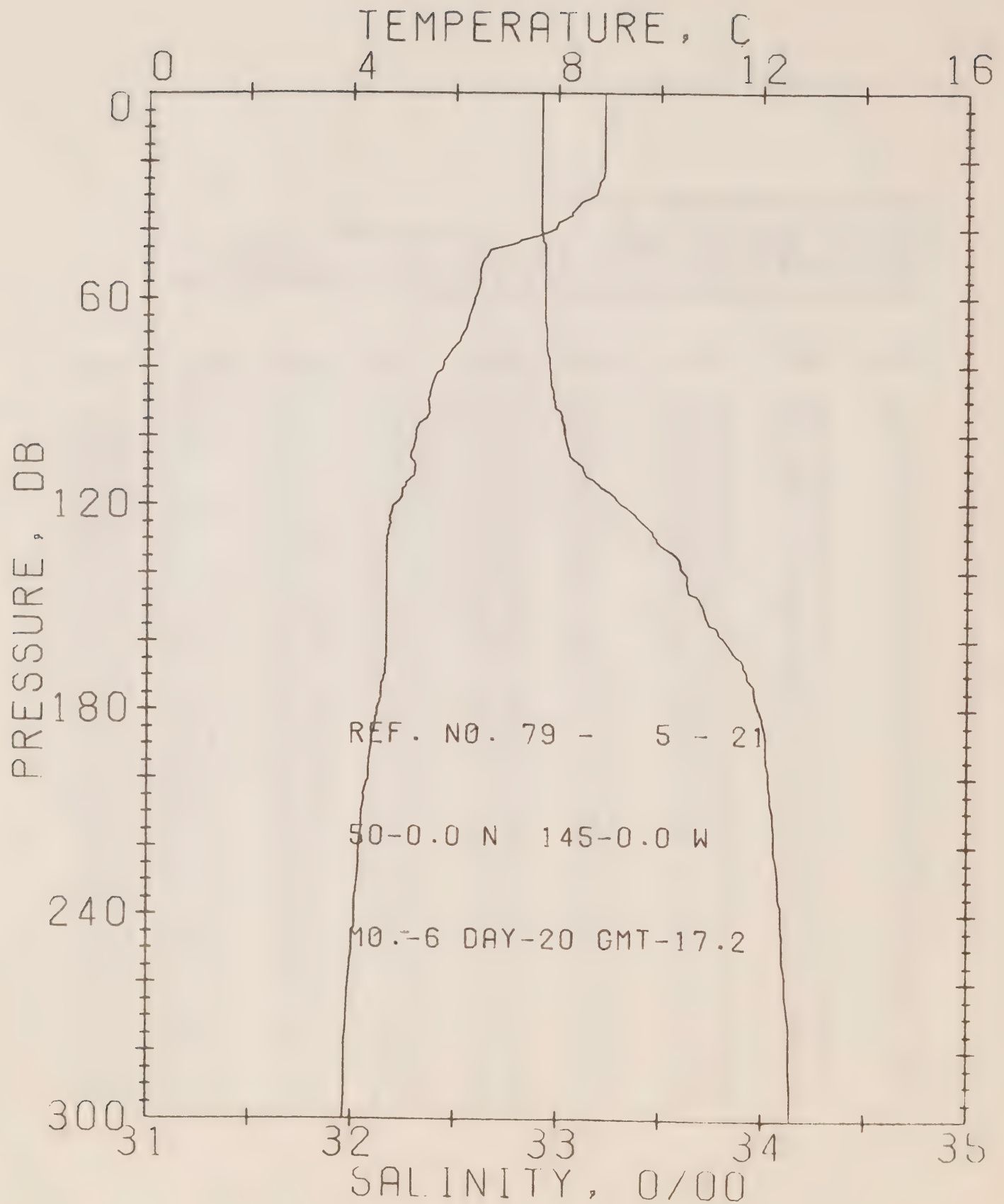
DATE 20/ 6/79

POSITION 49-52.0N, 145- 7.0W GMT .3 STATION W3

RESULTS OF STP CAST 200 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.95	32.90	0	25.51	248.5	.00	.00	1484.
10	8.94	32.90	10	25.51	248.5	.25	.01	1484.
20	8.88	32.90	20	25.52	247.9	.50	.05	1484.
30	8.48	32.90	30	25.58	242.2	.74	.11	1483.
40	8.31	32.90	40	25.60	239.9	.98	.20	1482.
50	7.29	32.90	50	25.75	225.6	1.22	.31	1478.
60	6.66	32.97	60	25.89	212.8	1.44	.43	1476.
70	6.52	32.97	70	25.91	211.1	1.65	.57	1476.
80	6.15	32.97	79	25.96	206.8	1.86	.73	1474.
90	5.90	32.97	89	25.99	203.9	2.06	.91	1473.
100	5.39	32.99	99	26.07	196.3	2.26	1.10	1472.
110	5.18	33.07	109	26.15	188.4	2.45	1.31	1471.
120	4.87	33.21	119	26.30	174.6	2.64	1.52	1470.
130	4.59	33.42	129	26.49	156.0	2.80	1.73	1469.
140	4.46	33.52	139	26.59	147.2	2.96	1.94	1469.
150	4.40	33.69	149	26.73	134.0	3.10	2.15	1469.
160	4.35	33.85	159	26.86	121.5	3.23	2.35	1469.
170	4.47	33.93	169	26.91	116.9	3.35	2.56	1470.
180	4.54	33.98	179	26.95	113.6	3.46	2.76	1471.
190	4.44	34.00	189	26.97	111.6	3.57	2.97	1470.
200	4.29	34.03	199	27.01	107.8	3.68	3.19	1470.
210	4.16	34.04	208	27.03	105.8	3.79	3.41	1470.
220	4.06	34.04	218	27.04	104.8	3.90	3.64	1469.
230	4.00	34.05	228	27.05	103.6	4.00	3.88	1469.
240	4.00	34.08	238	27.08	101.4	4.10	4.13	1470.
250	3.97	34.09	248	27.09	100.4	4.20	4.38	1470.
260	3.77	34.09	258	27.11	98.5	4.30	4.64	1469.
270	3.81	34.10	268	27.11	98.2	4.40	4.90	1469.
280	3.78	34.11	278	27.12	97.2	4.50	5.18	1469.
290	3.70	34.12	288	27.14	96.0	4.60	5.46	1469.
300	3.64	34.12	298	27.15	95.3	4.69	5.75	1469.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 21

DATE 20/ 6/79

POSITION 50- .0N, 145- .0W

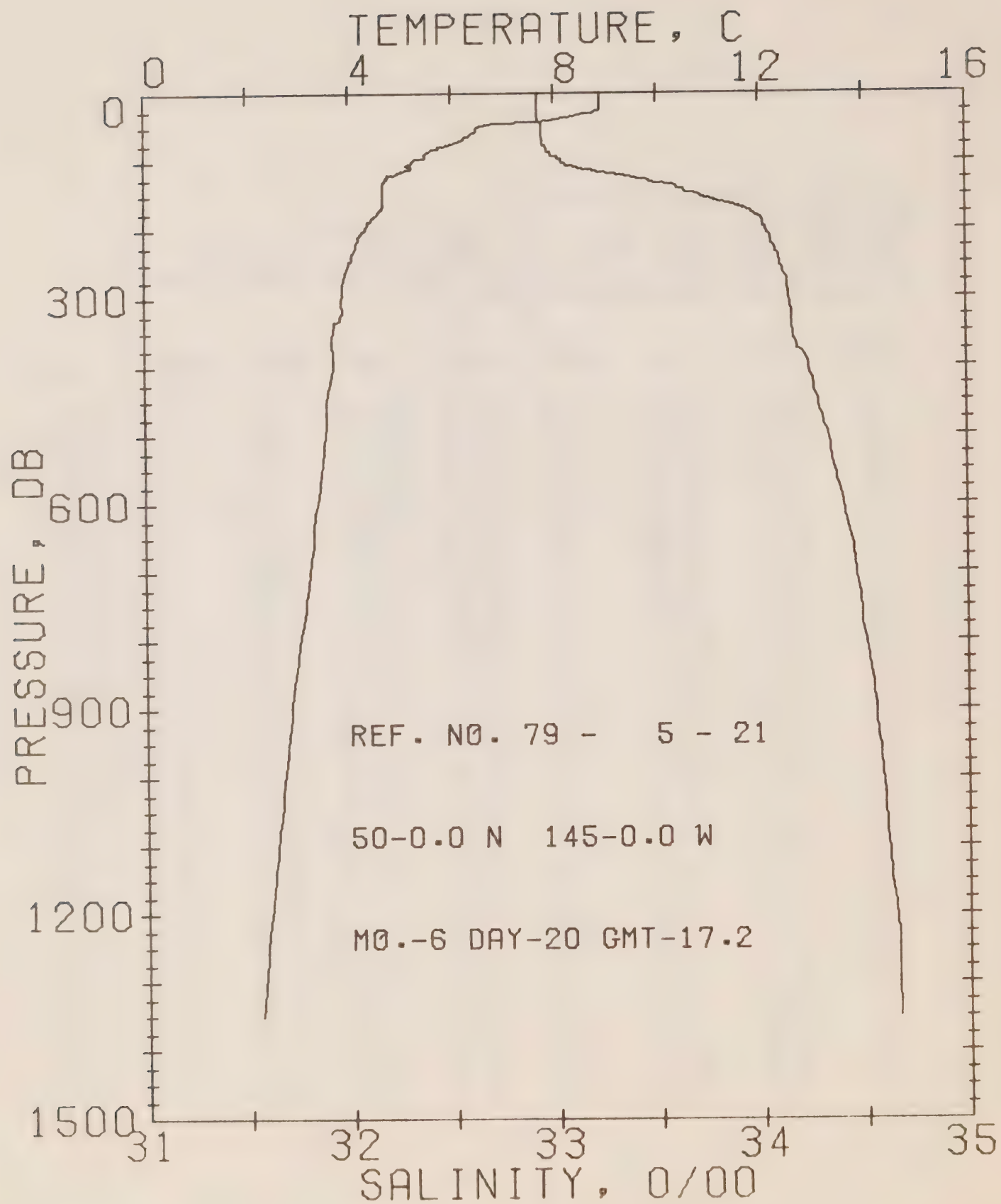
GMT 17.2

STATION P

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.91	32.92	0	25.53	246.4	.00	.00	1484.
10	8.91	32.92	10	25.53	246.6	.25	.01	1484.
20	8.91	32.92	20	25.53	246.8	.49	.05	1484.
30	8.74	32.92	30	25.55	244.4	.74	.11	1484.
40	7.96	32.92	40	25.67	233.5	.98	.20	1481.
50	6.51	32.94	50	25.89	213.1	1.20	.30	1475.
60	6.38	32.94	60	25.90	211.6	1.41	.42	1475.
70	6.15	32.95	70	25.94	208.2	1.62	.56	1474.
80	5.75	32.96	79	26.00	202.8	1.83	.71	1473.
90	5.47	32.99	89	26.05	197.4	2.03	.89	1472.
100	5.23	33.03	99	26.12	191.4	2.22	1.08	1471.
110	5.21	33.12	109	26.19	184.6	2.41	1.28	1471.
120	4.85	33.31	119	26.38	166.9	2.58	1.48	1470.
130	4.68	33.48	129	26.53	152.5	2.74	1.69	1470.
140	4.67	33.61	139	26.64	142.3	2.89	1.89	1470.
150	4.66	33.71	149	26.71	135.2	3.03	2.09	1470.
160	4.66	33.82	159	26.80	126.8	3.16	2.30	1471.
170	4.63	33.93	169	26.89	118.6	3.28	2.51	1471.
180	4.49	33.99	179	26.95	112.7	3.40	2.71	1470.
190	4.36	34.02	189	26.99	109.2	3.51	2.92	1470.
200	4.31	34.03	199	27.01	108.0	3.62	3.14	1470.
210	4.19	34.05	208	27.03	105.3	3.73	3.36	1470.
220	4.14	34.06	218	27.05	104.2	3.83	3.59	1470.
230	4.10	34.08	228	27.07	102.3	3.93	3.83	1470.
240	4.05	34.09	238	27.08	101.2	4.04	4.07	1470.
250	3.99	34.10	248	27.09	99.9	4.14	4.32	1470.
260	3.94	34.11	258	27.11	98.7	4.24	4.58	1470.
270	3.90	34.12	268	27.12	97.4	4.33	4.85	1470.
280	3.88	34.13	278	27.13	96.7	4.43	5.12	1470.
290	3.86	34.14	288	27.14	96.2	4.53	5.40	1470.
300	3.85	34.14	298	27.14	95.9	4.62	5.69	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 21

DATE 20/ 6/79

POSITION 50- .0N, 145- .0W

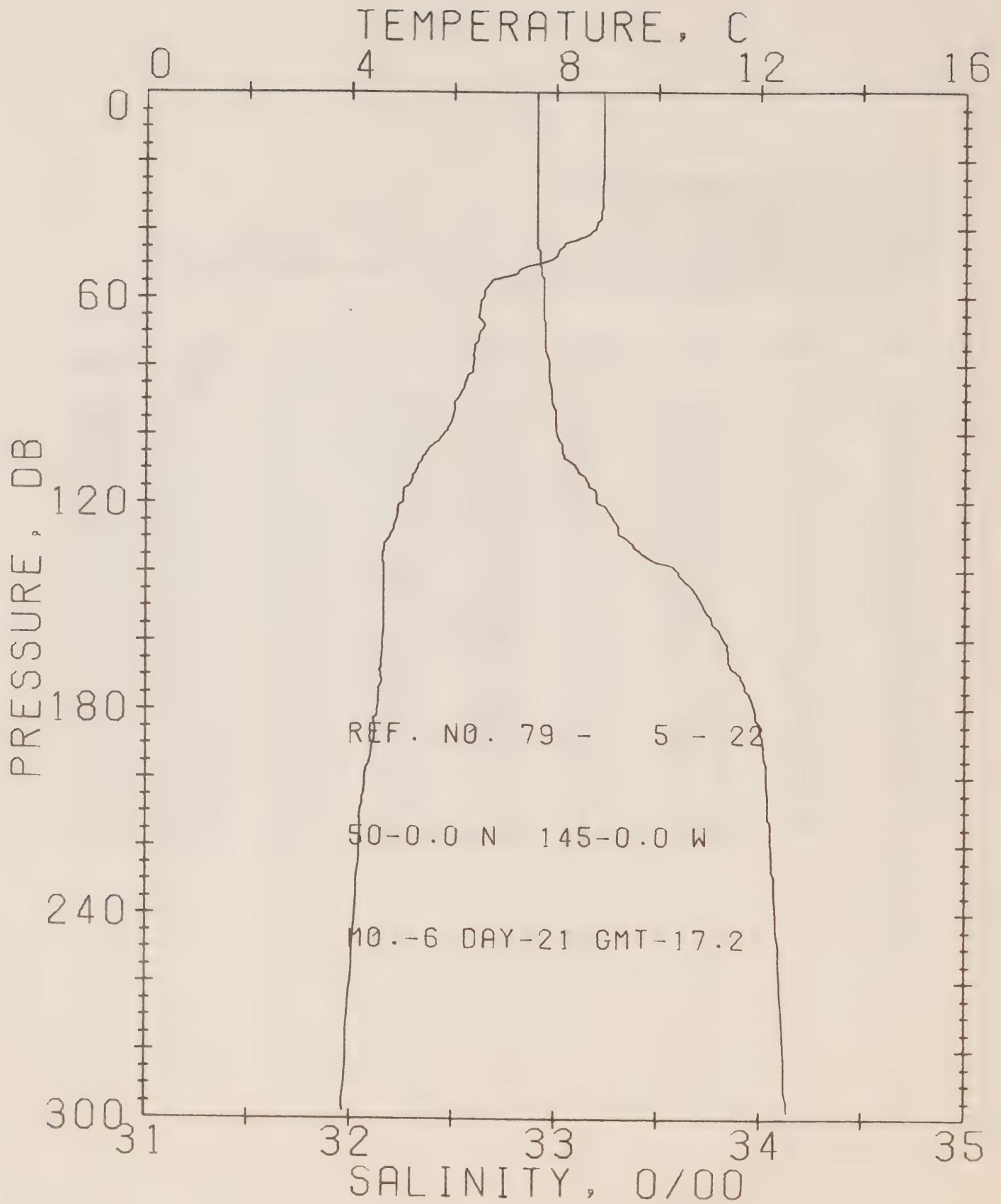
GMT 17.2

STATION P

RESULTS OF STP CAST 252 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.91	32.92	0	25.53	246.4	.00	.00	1484.
10	8.91	32.92	10	25.53	246.6	.25	.01	1484.
20	8.91	32.92	20	25.53	246.8	.49	.05	1484.
30	8.74	32.92	30	25.55	244.4	.74	.11	1484.
50	6.51	32.94	50	25.89	213.1	1.20	.30	1475.
75	5.91	32.95	75	25.97	205.4	1.72	.63	1473.
100	5.23	33.03	99	26.12	191.4	2.22	1.08	1471.
125	4.72	33.41	124	26.47	158.1	2.67	1.58	1470.
150	4.66	33.71	149	26.71	135.2	3.03	2.09	1470.
175	4.57	33.96	174	26.93	115.5	3.34	2.61	1471.
200	4.31	34.03	199	27.01	108.0	3.62	3.14	1470.
225	4.13	34.07	223	27.06	103.4	3.88	3.71	1470.
250	3.99	34.10	248	27.09	99.9	4.14	4.32	1470.
300	3.85	34.14	298	27.14	95.9	4.62	5.69	1470.
400	3.67	34.23	397	27.23	88.1	5.55	8.99	1471.
500	3.52	34.33	496	27.33	79.7	6.39	12.83	1472.
600	3.35	34.40	595	27.40	73.6	7.16	17.14	1473.
800	3.00	34.51	793	27.51	63.6	8.53	26.86	1475.
1000	2.68	34.58	990	27.60	55.6	9.71	37.70	1477.
1200	2.40	34.64	1188	27.67	49.3	10.77	49.50	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 22

DATE 21/ 6/79

POSITION 50- .0N, 145- .0W

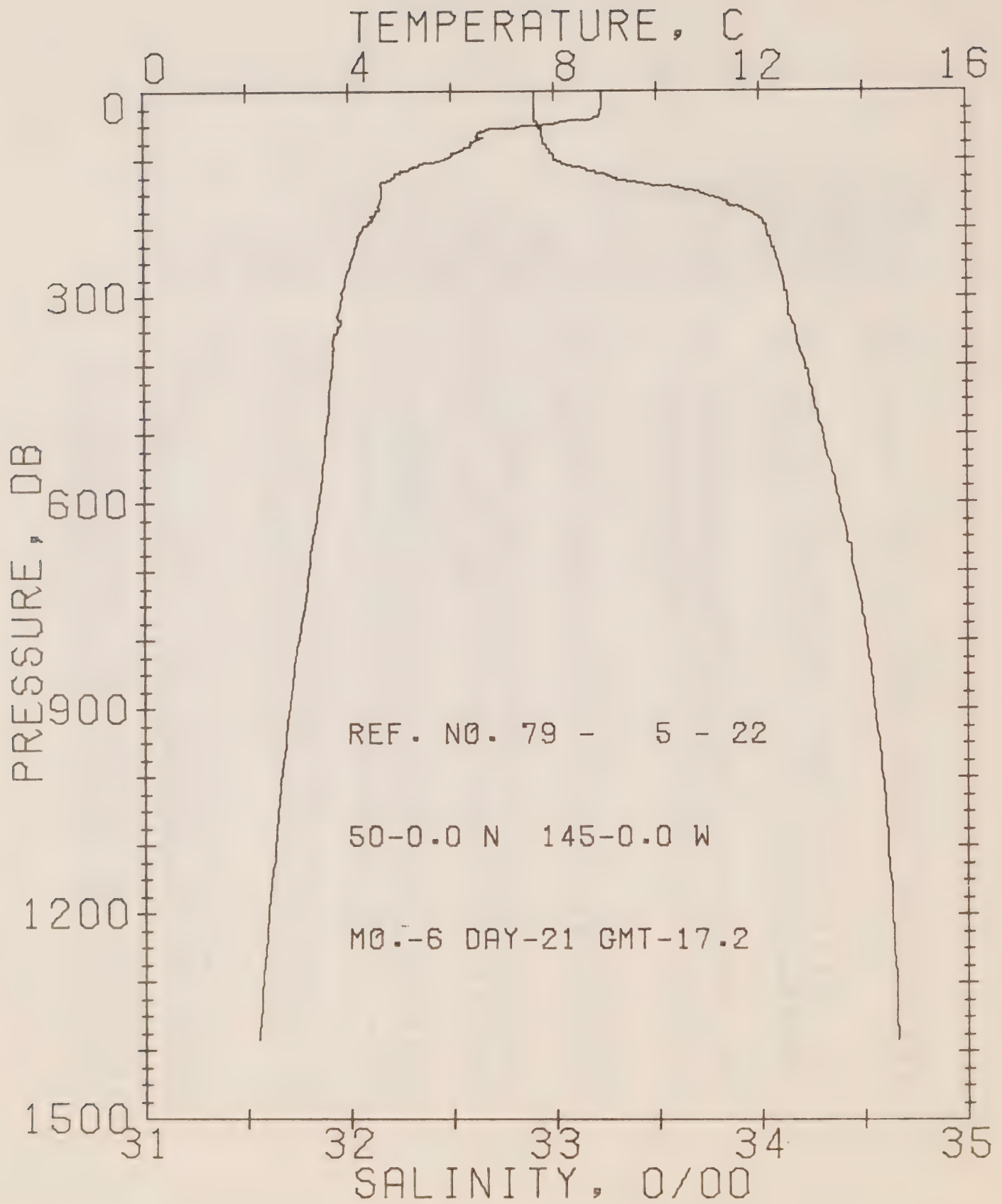
GMT 17.2

STATION P

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.93	32.91	0	25.52	247.5	.00	.00	1484.
10	8.93	32.91	10	25.52	247.6	.25	.01	1484.
20	8.93	32.91	20	25.52	247.8	.50	.05	1484.
30	8.92	32.91	30	25.52	247.8	.74	.11	1484.
40	8.77	32.91	40	25.54	245.8	.99	.20	1484.
50	7.67	32.92	50	25.71	229.6	1.23	.31	1480.
60	6.58	32.94	60	25.88	214.0	1.45	.43	1476.
70	6.52	32.95	70	25.89	212.7	1.66	.57	1476.
80	6.38	32.97	79	25.93	209.6	1.87	.74	1475.
90	6.04	32.98	89	25.98	204.8	2.08	.92	1474.
100	5.81	33.01	99	26.03	200.3	2.28	1.11	1473.
110	5.29	33.10	109	26.16	187.4	2.48	1.32	1471.
120	5.01	33.20	119	26.27	176.9	2.66	1.53	1471.
130	4.74	33.34	129	26.41	163.6	2.83	1.75	1470.
140	4.64	33.60	139	26.63	143.1	2.98	1.96	1470.
150	4.64	33.72	149	26.72	134.2	3.12	2.16	1470.
160	4.62	33.83	159	26.81	125.9	3.25	2.37	1470.
170	4.59	33.91	169	26.88	119.7	3.37	2.58	1471.
180	4.53	33.98	179	26.94	114.1	3.49	2.79	1471.
190	4.43	34.01	189	26.98	110.3	3.60	3.00	1470.
200	4.28	34.03	199	27.01	107.7	3.71	3.21	1470.
210	4.18	34.04	208	27.03	106.0	3.82	3.44	1470.
220	4.17	34.05	218	27.04	105.0	3.92	3.67	1470.
230	4.11	34.07	228	27.06	103.2	4.03	3.91	1470.
240	4.09	34.08	238	27.07	102.4	4.13	4.15	1470.
250	4.03	34.09	248	27.08	101.0	4.23	4.41	1470.
260	4.00	34.10	258	27.09	100.1	4.33	4.67	1470.
270	3.95	34.11	268	27.10	99.1	4.43	4.94	1470.
280	3.92	34.12	278	27.11	98.2	4.53	5.21	1470.
290	3.87	34.12	288	27.12	97.5	4.63	5.50	1470.
300	3.86	34.13	298	27.13	96.6	4.72	5.79	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 22

DATE 21/ 6/79

POSITION 50- .0N, 145- .0W

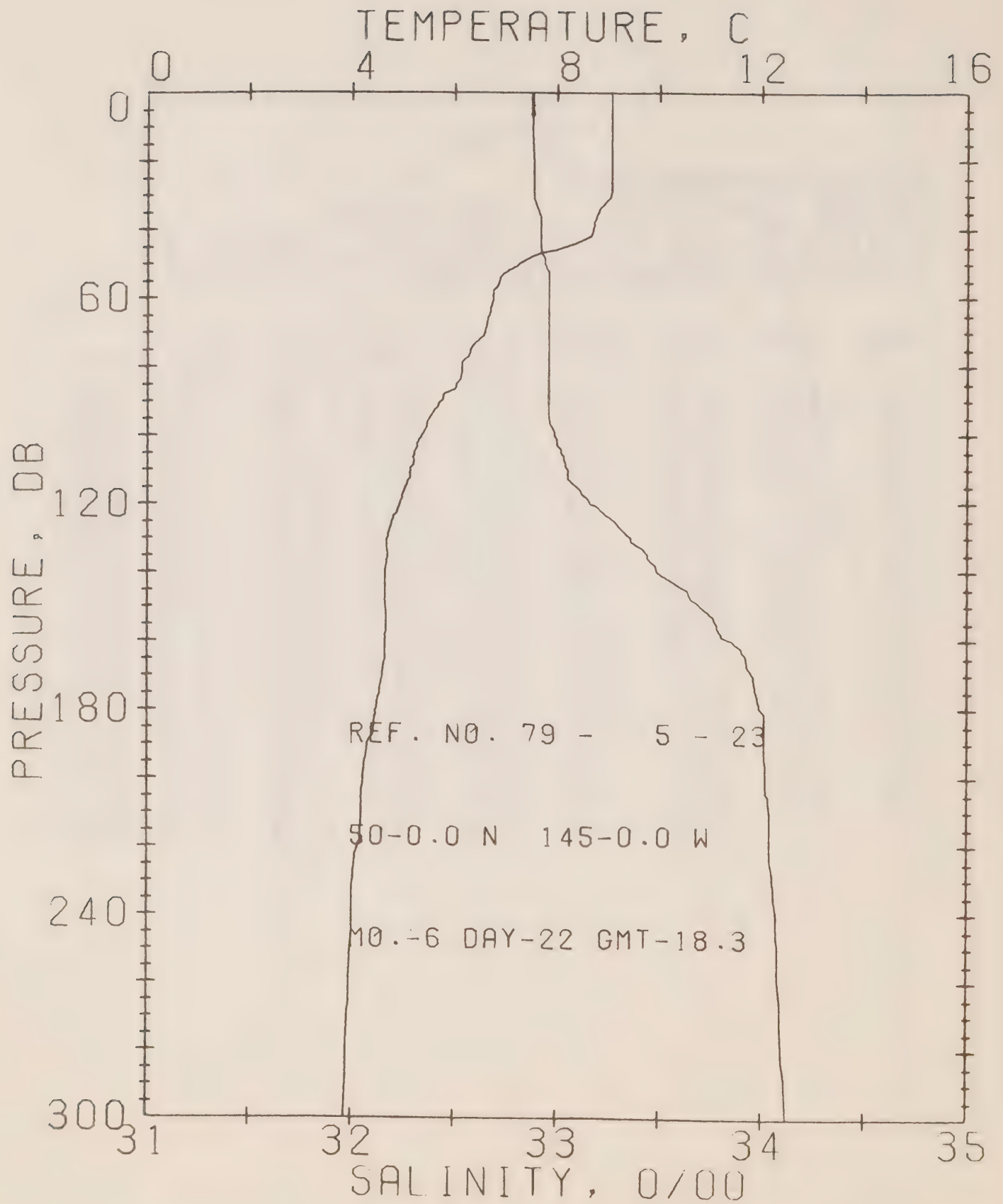
GMT 17.2

STATION P

RESULTS OF STP CAST 288 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	8.93	32.91	0	25.52	247.5	.00	.00	1484.
10	8.93	32.91	10	25.52	247.6	.25	.01	1484.
20	8.93	32.91	20	25.52	247.8	.50	.05	1484.
30	8.92	32.91	30	25.52	247.8	.74	.11	1484.
50	7.67	32.92	50	25.71	229.6	1.23	.31	1480.
75	6.41	32.95	75	25.91	211.4	1.77	.65	1475.
100	5.81	33.01	99	26.03	200.3	2.28	1.11	1473.
125	4.87	33.29	124	26.36	168.7	2.74	1.64	1470.
150	4.64	33.72	149	26.72	134.2	3.12	2.16	1470.
175	4.54	33.95	174	26.92	116.2	3.43	2.68	1471.
200	4.28	34.03	199	27.01	107.7	3.71	3.21	1470.
225	4.14	34.06	223	27.05	104.2	3.97	3.79	1470.
250	4.03	34.09	248	27.08	101.0	4.23	4.41	1470.
300	3.86	34.13	298	27.13	96.6	4.72	5.79	1470.
400	3.67	34.22	397	27.22	88.8	5.66	9.11	1471.
500	3.54	34.30	496	27.30	82.0	6.51	13.03	1472.
600	3.40	34.38	595	27.38	75.6	7.30	17.44	1473.
800	3.00	34.51	793	27.52	63.2	8.68	27.23	1475.
1000	2.66	34.58	990	27.61	55.3	9.86	38.02	1477.
1200	2.40	34.63	1188	27.66	50.2	10.91	49.76	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 23

DATE 22/ 6/79

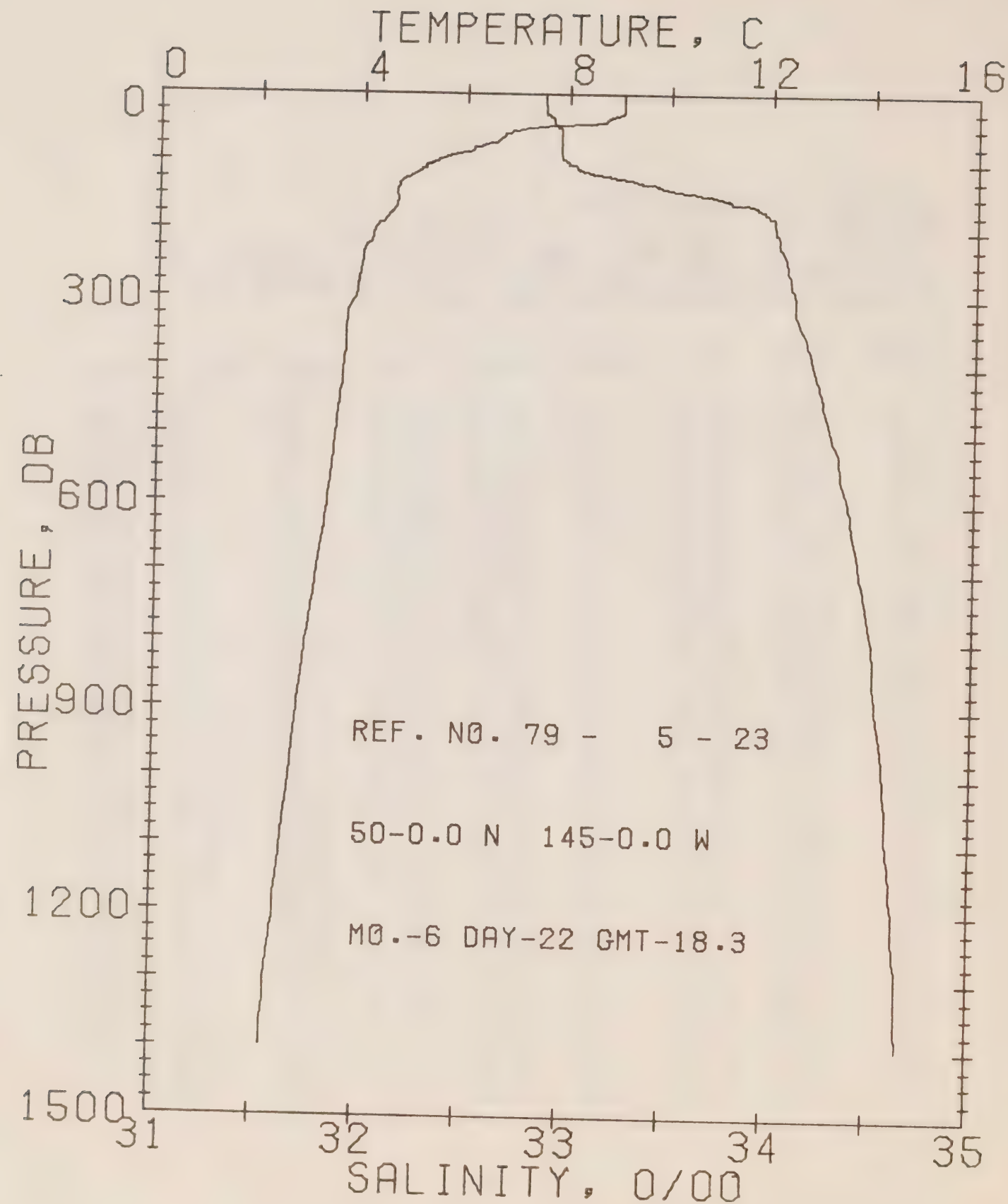
POSITION 50- .0N, 145- .0W GMT 18.3

STATION P

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.06	32.88	0	25.47	251.6	.00	.00	1484.
10	9.06	32.88	10	25.47	251.8	.25	.01	1484.
20	9.06	32.89	20	25.48	251.2	.50	.05	1485.
30	9.04	32.89	30	25.48	251.2	.75	.12	1485.
40	8.72	32.92	40	25.56	244.2	1.00	.20	1484.
50	7.26	32.94	50	25.79	222.6	1.24	.31	1478.
60	6.75	32.96	60	25.87	214.7	1.45	.43	1476.
70	6.60	32.96	70	25.89	212.9	1.67	.57	1476.
80	6.14	32.96	79	25.95	207.4	1.88	.73	1474.
90	5.76	32.96	89	26.00	203.0	2.08	.91	1473.
100	5.35	32.99	99	26.07	196.2	2.28	1.11	1471.
110	5.13	33.05	109	26.14	189.3	2.48	1.31	1471.
120	4.94	33.16	119	26.25	179.1	2.66	1.53	1470.
130	4.69	33.36	129	26.43	161.6	2.83	1.75	1470.
140	4.65	33.49	139	26.54	151.5	2.99	1.96	1470.
150	4.65	33.70	149	26.71	135.8	3.13	2.17	1470.
160	4.64	33.86	159	26.84	123.9	3.26	2.38	1471.
170	4.58	33.96	169	26.92	115.8	3.38	2.58	1471.
180	4.49	34.00	179	26.96	112.0	3.49	2.78	1471.
190	4.30	34.01	189	26.99	109.3	3.60	2.99	1470.
200	4.22	34.02	199	27.01	107.8	3.71	3.21	1470.
210	4.18	34.04	208	27.03	106.0	3.82	3.43	1470.
220	4.10	34.04	218	27.04	105.2	3.93	3.66	1470.
230	4.02	34.05	228	27.05	103.8	4.03	3.90	1469.
240	4.01	34.07	238	27.07	102.2	4.13	4.15	1470.
250	3.98	34.08	248	27.08	101.3	4.23	4.40	1470.
260	3.95	34.08	258	27.08	100.9	4.34	4.67	1470.
270	3.93	34.09	268	27.09	100.1	4.44	4.94	1470.
280	3.90	34.10	278	27.10	99.3	4.54	5.22	1470.
290	3.88	34.11	288	27.11	98.3	4.63	5.50	1470.
300	3.86	34.12	298	27.12	97.5	4.73	5.80	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 23

DATE 22/ 6/79

POSITION 50- .0N, 145- .0W

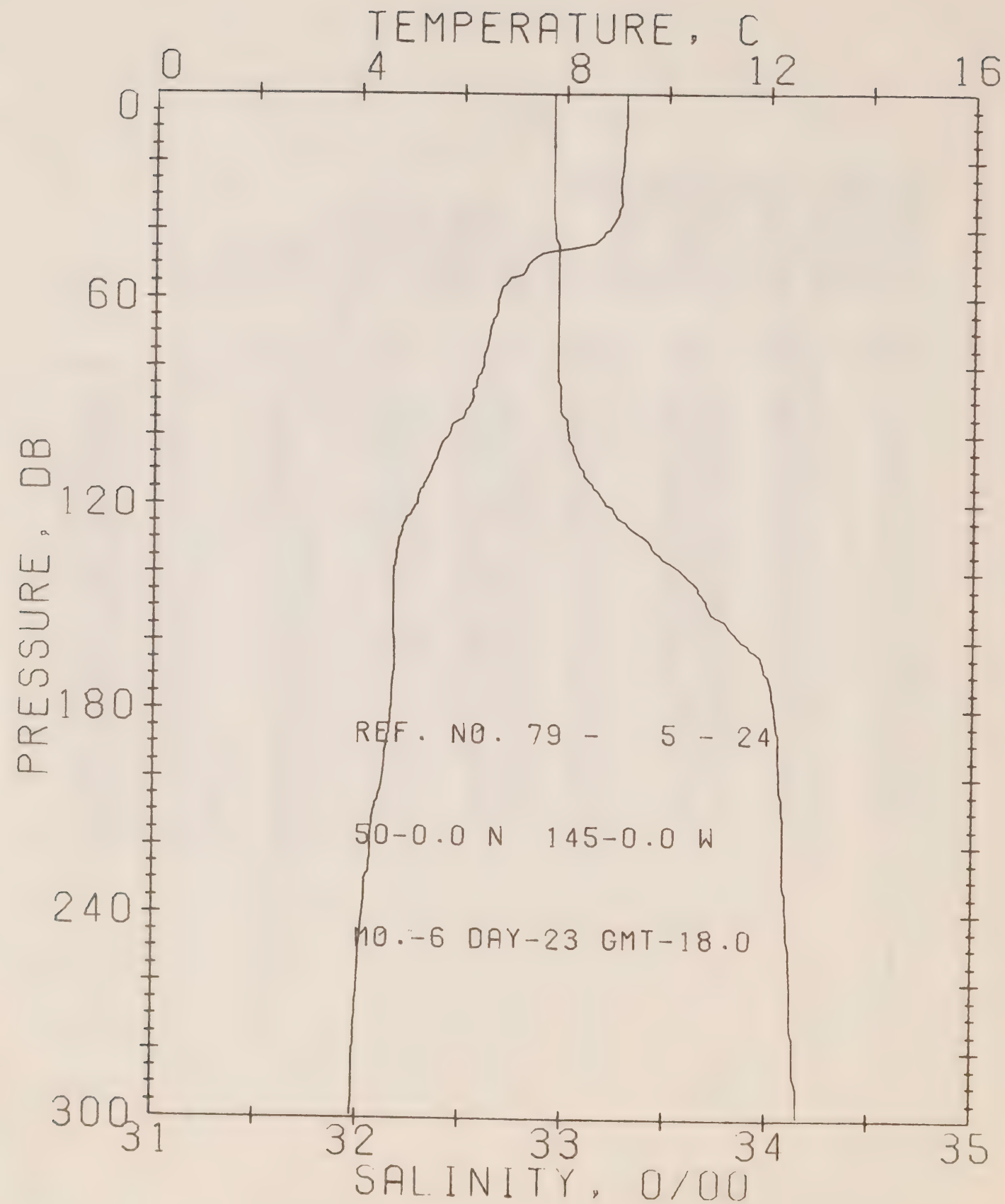
GMT 18.3

STATION P

RESULTS OF STP CAST 254 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.06	32.88	0	25.47	251.6	.00	.00	1484.
10	9.06	32.88	10	25.47	251.8	.25	.01	1484.
20	9.06	32.89	20	25.48	251.2	.50	.05	1485.
30	9.04	32.89	30	25.48	251.2	.75	.12	1485.
50	7.26	32.94	50	25.79	222.6	1.24	.31	1478.
75	6.30	32.96	75	25.93	209.3	1.77	.65	1475.
100	5.35	32.99	99	26.07	196.2	2.28	1.11	1471.
125	4.77	33.28	124	26.36	168.4	2.75	1.64	1470.
150	4.65	33.70	149	26.71	135.8	3.13	2.17	1470.
175	4.54	33.97	174	26.94	114.3	3.44	2.68	1471.
200	4.22	34.02	199	27.01	107.8	3.71	3.21	1470.
225	4.05	34.04	223	27.04	104.5	3.98	3.78	1469.
250	3.98	34.08	248	27.08	101.3	4.23	4.40	1470.
300	3.86	34.12	298	27.12	97.5	4.73	5.80	1470.
400	3.65	34.21	397	27.22	89.3	5.67	9.12	1471.
500	3.51	34.30	496	27.30	81.7	6.52	13.03	1472.
600	3.35	34.39	595	27.39	74.4	7.30	17.39	1473.
800	2.98	34.51	793	27.52	63.0	8.68	27.17	1475.
1000	2.68	34.58	990	27.60	56.2	9.87	38.12	1477.
1200	2.43	34.63	1188	27.66	50.6	10.94	50.08	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 24

DATE 23/ 6/79

POSITION 50- .0N, 145- .0W

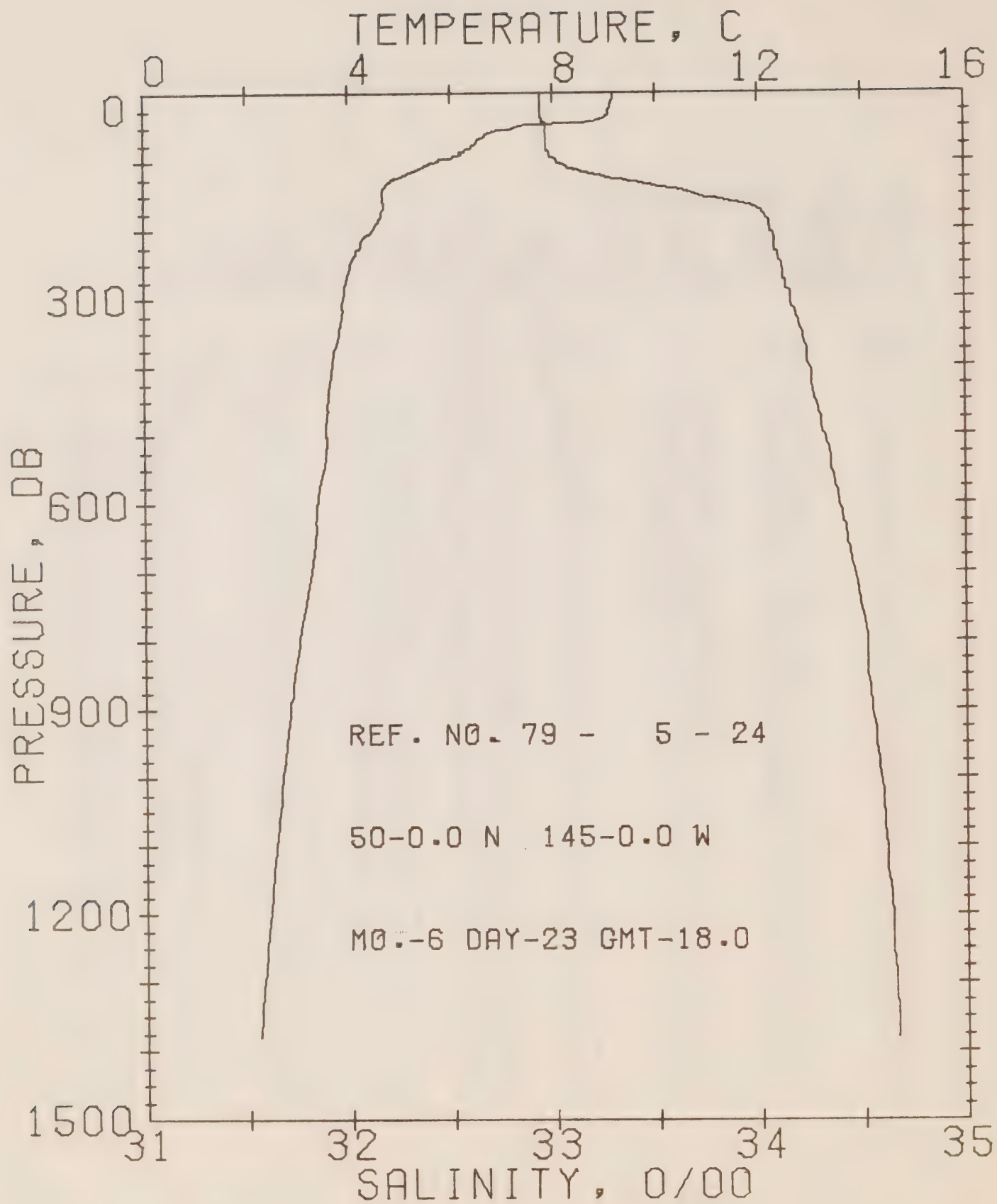
GMT 18.0

STATION P

RESULTS OF STP CAST 177 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.18	32.94	0	25.50	249.0	.00	.00	1485.
10	9.18	32.94	10	25.50	249.2	.25	.01	1485.
20	9.12	32.94	20	25.51	248.5	.50	.05	1485.
30	9.08	32.94	30	25.52	248.0	.75	.11	1485.
40	8.86	32.95	40	25.56	244.2	.99	.20	1484.
50	7.24	32.97	50	25.81	220.1	1.22	.31	1478.
60	6.70	32.97	60	25.88	213.3	1.44	.43	1476.
70	6.51	32.97	70	25.91	211.1	1.65	.57	1476.
80	6.39	32.97	79	25.92	209.7	1.86	.73	1475.
90	6.18	32.98	89	25.96	206.5	2.07	.91	1475.
100	5.73	33.02	99	26.05	198.3	2.27	1.11	1473.
110	5.38	33.09	109	26.14	189.1	2.47	1.31	1472.
120	5.11	33.20	119	26.26	178.0	2.65	1.53	1471.
130	4.78	33.40	129	26.46	159.5	2.82	1.74	1470.
140	4.68	33.57	139	26.61	145.4	2.97	1.96	1470.
150	4.66	33.70	149	26.71	136.0	3.11	2.16	1470.
160	4.69	33.87	159	26.84	123.7	3.24	2.37	1471.
170	4.66	34.00	169	26.94	113.7	3.36	2.56	1471.
180	4.62	34.03	179	26.97	111.1	3.47	2.76	1471.
190	4.55	34.05	189	27.00	108.9	3.58	2.97	1471.
200	4.46	34.06	199	27.01	107.4	3.69	3.19	1471.
210	4.29	34.07	208	27.04	104.9	3.80	3.41	1470.
220	4.24	34.08	218	27.05	103.7	3.90	3.64	1470.
230	4.14	34.08	228	27.06	102.8	4.00	3.87	1470.
240	4.09	34.09	238	27.08	101.3	4.11	4.12	1470.
250	4.03	34.11	248	27.10	99.5	4.21	4.37	1470.
260	4.00	34.12	258	27.11	98.7	4.31	4.63	1470.
270	3.97	34.12	268	27.11	98.3	4.41	4.89	1470.
280	3.93	34.13	278	27.12	97.3	4.50	5.17	1470.
290	3.91	34.14	288	27.14	96.0	4.60	5.45	1470.
300	3.89	34.15	298	27.14	95.5	4.70	5.74	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 24

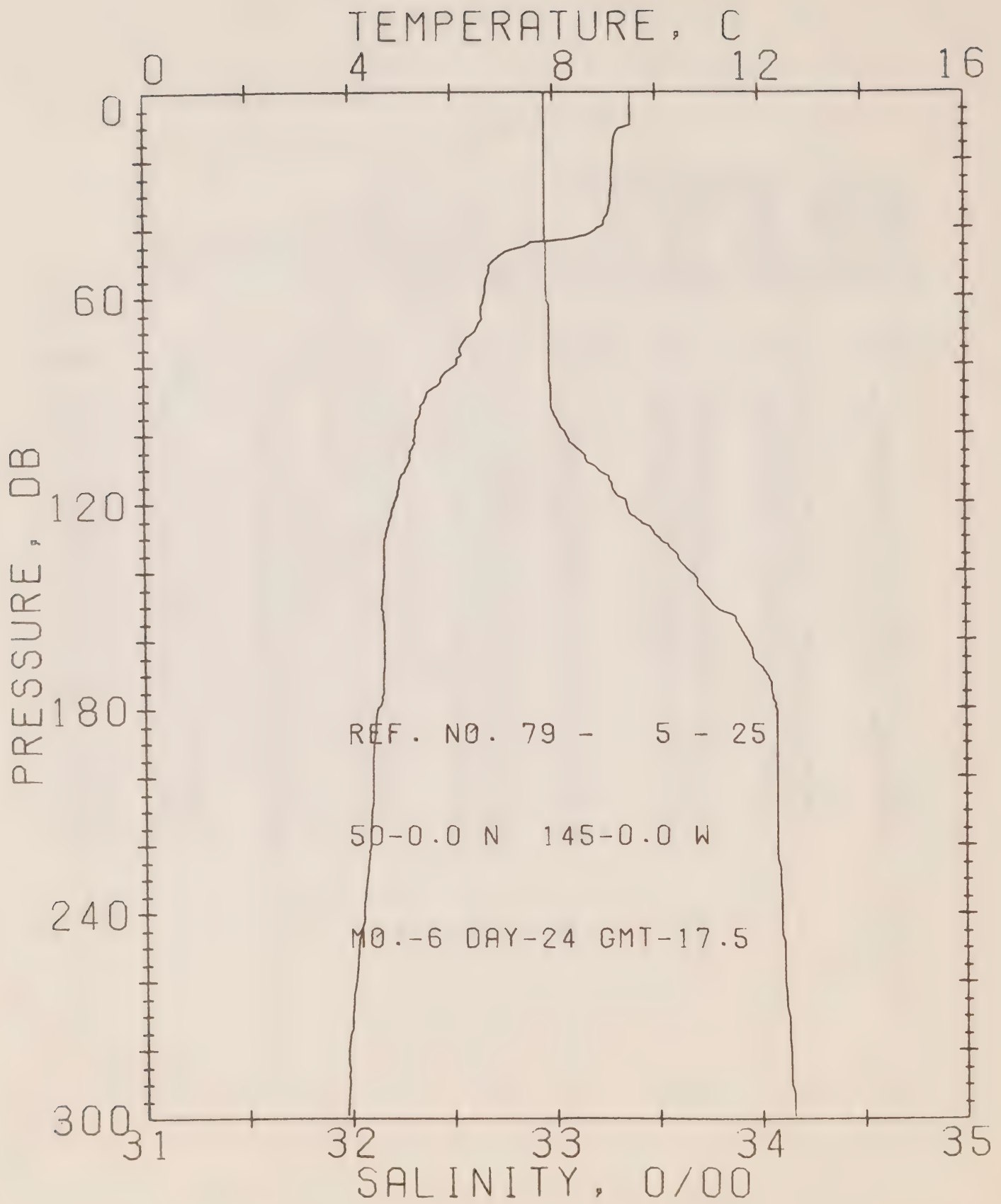
DATE 23/ 6/79

POSITION 50- .0N, 145- .0W GMT 18.0 STATION P

RESULTS OF STP CAST 289 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.18	32.94	0	25.50	249.0	.00	.00	1485.
10	9.18	32.94	10	25.50	249.2	.25	.01	1485.
20	9.12	32.94	20	25.51	248.5	.50	.05	1485.
30	9.08	32.94	30	25.52	248.0	.75	.11	1485.
50	7.24	32.97	50	25.81	220.1	1.22	.31	1478.
75	6.46	32.97	75	25.92	210.4	1.76	.65	1475.
100	5.73	33.02	99	26.05	198.3	2.27	1.11	1473.
125	4.89	33.30	124	26.36	168.2	2.74	1.64	1470.
150	4.66	33.70	149	26.71	136.0	3.11	2.16	1470.
175	4.64	34.02	174	26.96	112.1	3.42	2.66	1471.
200	4.46	34.06	199	27.01	107.4	3.69	3.19	1471.
225	4.22	34.08	223	27.05	103.5	3.95	3.75	1470.
250	4.03	34.11	248	27.10	99.5	4.21	4.37	1470.
300	3.89	34.15	298	27.14	95.5	4.70	5.74	1470.
400	3.67	34.24	397	27.24	87.4	5.61	8.98	1471.
500	3.55	34.32	496	27.31	81.3	6.45	12.85	1472.
600	3.38	34.39	595	27.39	74.6	7.23	17.22	1473.
800	3.01	34.52	793	27.52	62.5	8.60	26.96	1475.
1000	2.67	34.58	990	27.60	55.6	9.79	37.86	1477.
1200	2.41	34.64	1188	27.67	49.8	10.85	49.68	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 25

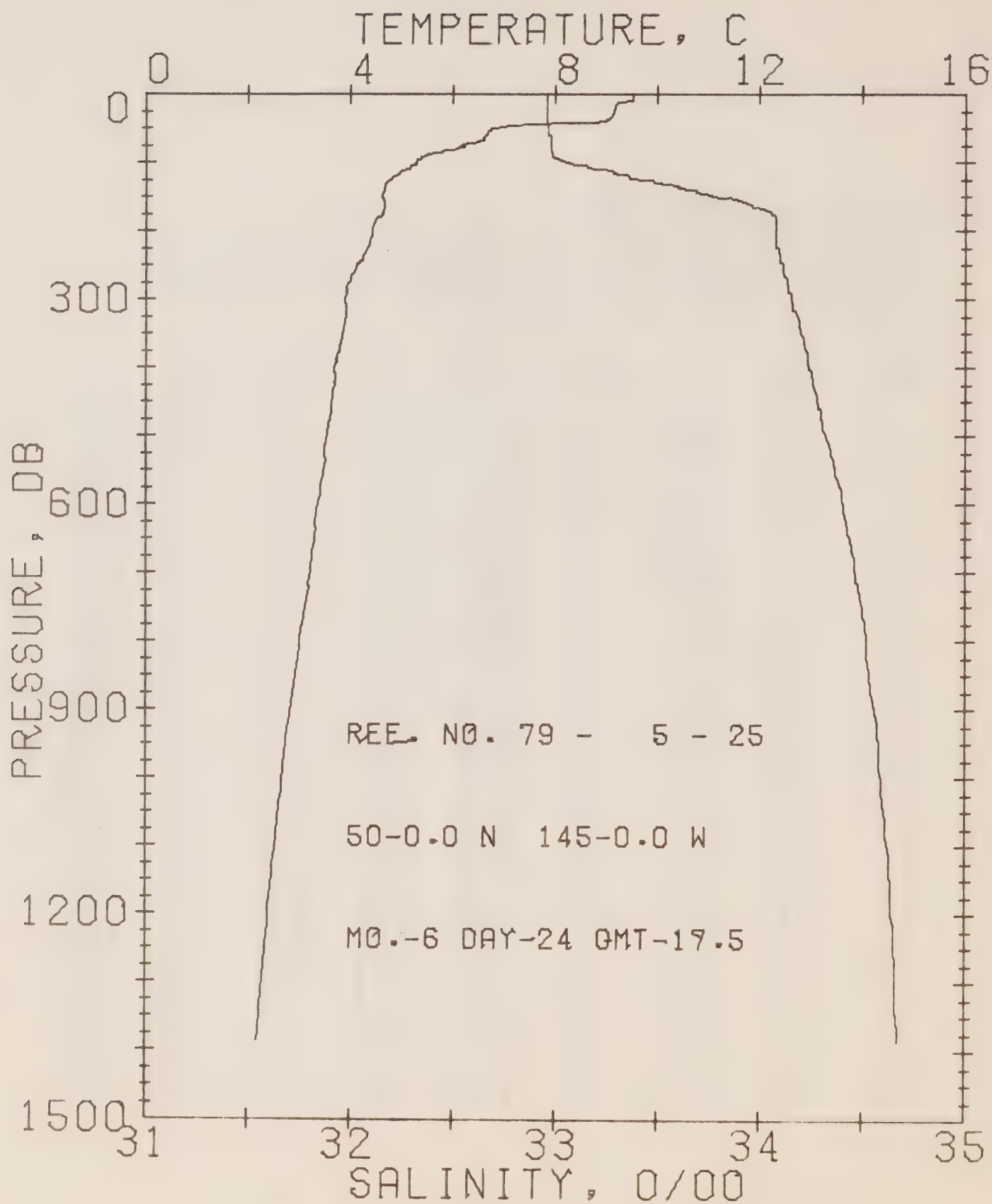
DATE 24/ 6/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.52	32.96	0	25.46	252.7	.00	.00	1486.
10	9.51	32.96	10	25.46	252.7	.25	.01	1486.
20	9.17	32.96	20	25.52	247.7	.50	.05	1485.
30	9.13	32.96	30	25.53	247.2	.75	.11	1485.
40	8.85	32.96	40	25.57	243.3	.99	.20	1484.
50	6.79	32.97	50	25.87	214.3	1.22	.31	1476.
60	6.65	32.97	60	25.89	212.6	1.43	.42	1476.
70	6.47	32.98	70	25.92	209.8	1.65	.56	1475.
80	6.12	32.98	79	25.97	205.7	1.85	.72	1474.
90	5.48	32.99	89	26.05	197.6	2.05	.90	1472.
100	5.27	33.06	99	26.13	190.1	2.25	1.09	1471.
110	5.10	33.21	109	26.27	177.0	2.43	1.28	1471.
120	4.88	33.35	119	26.41	164.0	2.60	1.48	1470.
130	4.70	33.51	129	26.55	150.4	2.76	1.68	1470.
140	4.67	33.66	139	26.67	139.0	2.90	1.88	1470.
150	4.61	33.78	149	26.78	129.4	3.04	2.08	1470.
160	4.66	33.94	159	26.90	118.1	3.16	2.27	1471.
170	4.65	34.03	169	26.97	111.4	3.28	2.47	1471.
180	4.53	34.08	179	27.02	106.4	3.39	2.66	1471.
190	4.46	34.08	189	27.03	105.8	3.49	2.86	1471.
200	4.43	34.08	199	27.03	105.6	3.60	3.07	1471.
210	4.40	34.08	208	27.04	105.3	3.70	3.29	1471.
220	4.37	34.08	218	27.04	105.0	3.81	3.52	1471.
230	4.30	34.09	228	27.05	103.7	3.91	3.76	1471.
240	4.24	34.10	238	27.07	102.4	4.02	4.01	1471.
250	4.13	34.11	248	27.09	100.6	4.12	4.26	1470.
260	4.07	34.11	258	27.09	100.0	4.22	4.52	1470.
270	4.01	34.13	268	27.12	98.0	4.32	4.79	1470.
280	3.94	34.14	278	27.13	96.7	4.41	5.06	1470.
290	3.94	34.14	288	27.13	96.7	4.51	5.34	1470.
300	3.90	34.15	298	27.14	95.6	4.61	5.63	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 25

DATE 24/ 6/79

POSITION 50- .0N, 145- .0W

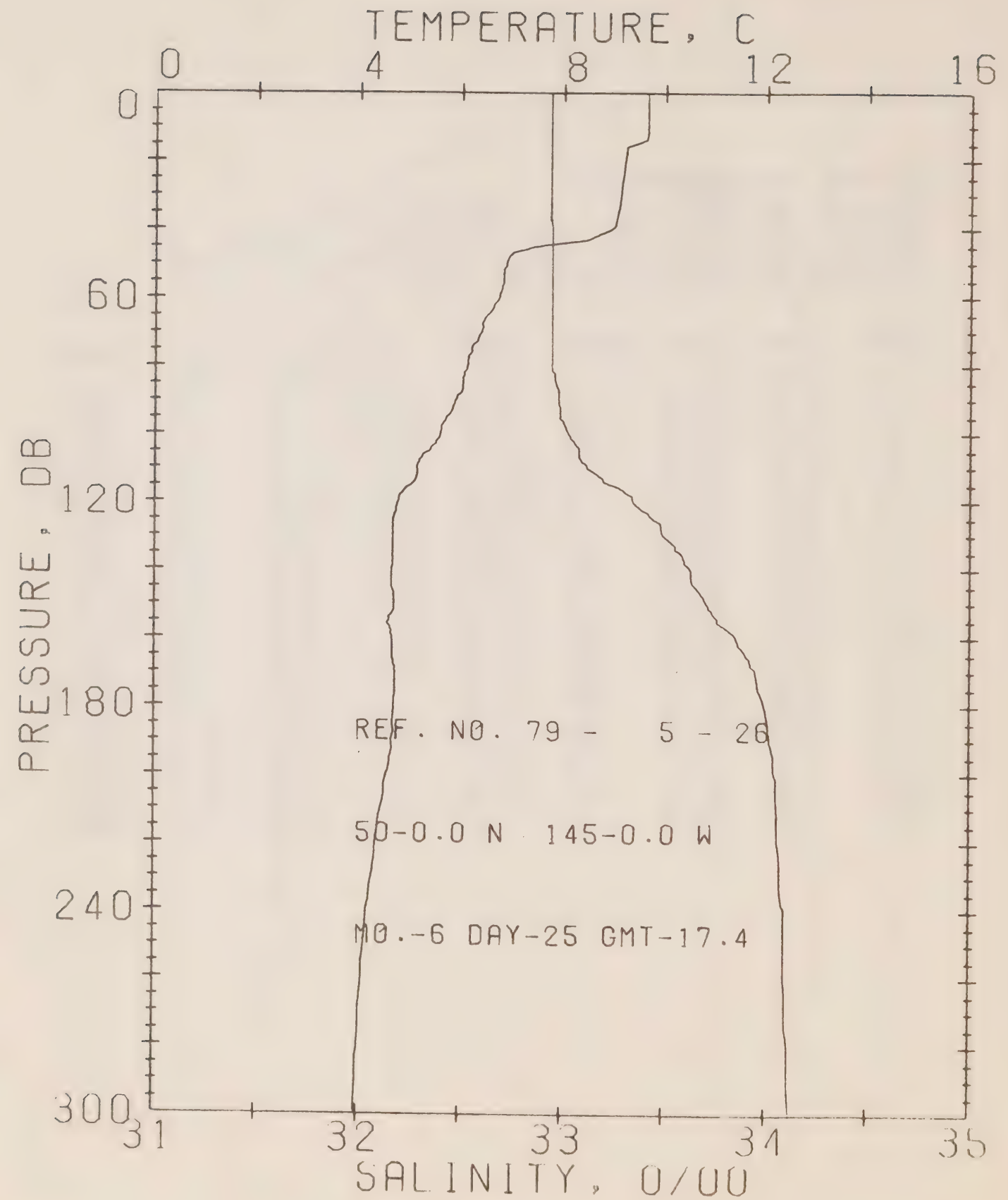
GMT 17.5

STATION P

RESULTS OF STP CAST 320 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.52	32.96	0	25.46	252.7	.00	.00	1486.
10	9.51	32.96	10	25.46	252.7	.25	.01	1486.
20	9.17	32.96	20	25.52	247.7	.50	.05	1485.
30	9.13	32.96	30	25.53	247.2	.75	.11	1485.
50	6.79	32.97	50	25.87	214.3	1.22	.31	1476.
75	6.17	32.98	75	25.96	206.2	1.75	.64	1474.
100	5.27	33.06	99	26.13	190.1	2.25	1.09	1471.
125	4.77	33.42	124	26.47	157.9	2.68	1.58	1470.
150	4.61	33.78	149	26.78	129.4	3.04	2.08	1470.
175	4.63	34.05	174	26.99	109.4	3.33	2.56	1471.
200	4.43	34.08	199	27.03	105.6	3.60	3.07	1471.
225	4.32	34.09	223	27.05	104.3	3.86	3.64	1471.
250	4.13	34.11	248	27.09	100.6	4.12	4.26	1470.
300	3.90	34.15	298	27.14	95.6	4.61	5.63	1470.
400	3.68	34.24	397	27.24	87.5	5.52	8.90	1471.
500	3.54	34.32	496	27.32	80.6	6.37	12.75	1472.
600	3.36	34.41	595	27.40	73.3	7.13	17.05	1473.
800	3.01	34.52	793	27.52	62.5	8.49	26.70	1475.
1000	2.68	34.59	990	27.61	55.3	9.67	37.47	1477.
1200	2.40	34.64	1188	27.67	49.5	10.71	49.10	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 26

DATE 25/ 6/79

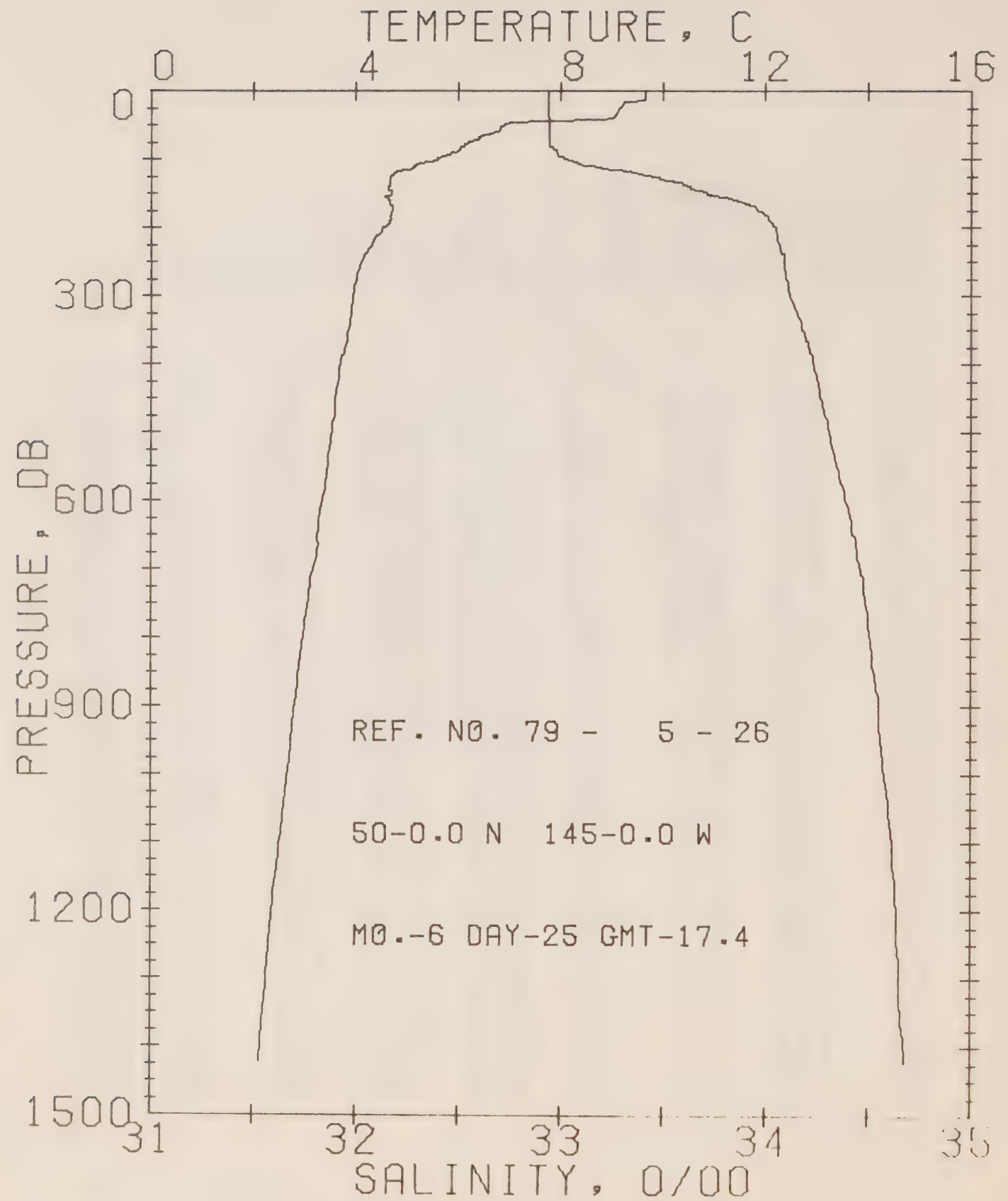
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.66	32.94	0	25.42	256.3	.00	.00	1487.
10	9.66	32.94	10	25.42	256.5	.26	.01	1487.
20	9.20	32.94	20	25.50	249.6	.51	.05	1485.
30	9.13	32.94	30	25.51	248.7	.76	.12	1485.
40	8.97	32.95	40	25.54	245.8	1.01	.20	1485.
50	6.88	32.95	50	25.85	217.0	1.24	.31	1477.
60	6.74	32.95	60	25.86	215.3	1.45	.43	1476.
70	6.39	32.95	70	25.91	211.1	1.66	.57	1475.
80	6.12	32.95	79	25.94	208.0	1.87	.73	1474.
90	5.91	32.98	89	25.99	203.2	2.08	.91	1473.
100	5.59	33.03	99	26.07	195.9	2.28	1.10	1472.
110	5.12	33.12	109	26.20	184.0	2.47	1.30	1471.
120	4.77	33.35	119	26.42	163.1	2.64	1.51	1470.
130	4.68	33.50	129	26.55	150.6	2.80	1.71	1470.
140	4.65	33.63	139	26.65	141.0	2.94	1.91	1470.
150	4.70	33.71	149	26.71	135.6	3.08	2.11	1470.
160	4.65	33.86	159	26.83	124.4	3.21	2.32	1471.
170	4.71	33.95	169	26.90	117.8	3.33	2.52	1471.
180	4.69	34.00	179	26.94	114.4	3.45	2.73	1471.
190	4.65	34.02	189	26.96	112.3	3.56	2.94	1471.
200	4.56	34.05	199	26.99	109.6	3.67	3.16	1471.
210	4.44	34.06	208	27.01	107.4	3.78	3.39	1471.
220	4.35	34.06	218	27.03	106.2	3.89	3.62	1471.
230	4.28	34.07	228	27.04	105.0	3.99	3.86	1471.
240	4.17	34.09	238	27.07	102.4	4.10	4.11	1470.
250	4.12	34.09	248	27.07	101.9	4.20	4.37	1470.
260	4.07	34.09	258	27.08	101.5	4.30	4.63	1470.
270	4.03	34.10	268	27.09	100.4	4.40	4.90	1470.
280	4.01	34.11	278	27.10	99.6	4.50	5.19	1470.
290	3.97	34.11	288	27.10	99.3	4.60	5.47	1470.
300	3.95	34.12	298	27.12	98.3	4.70	5.77	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 26

DATE 25/ 6/79

POSITION 50- .0N, 145- .0W

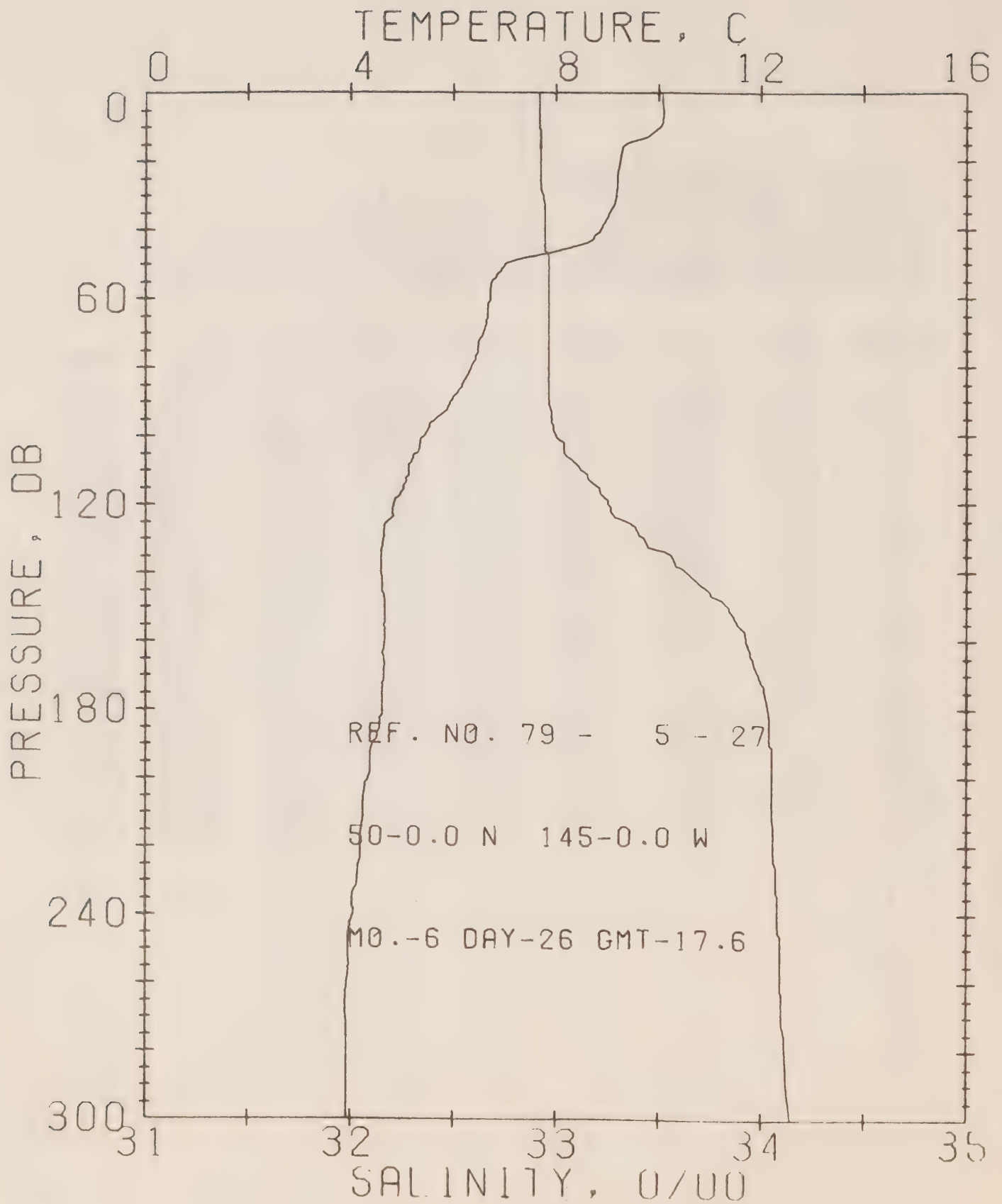
GMT 17.4

STATION P

RESULTS OF STP CAST 284 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

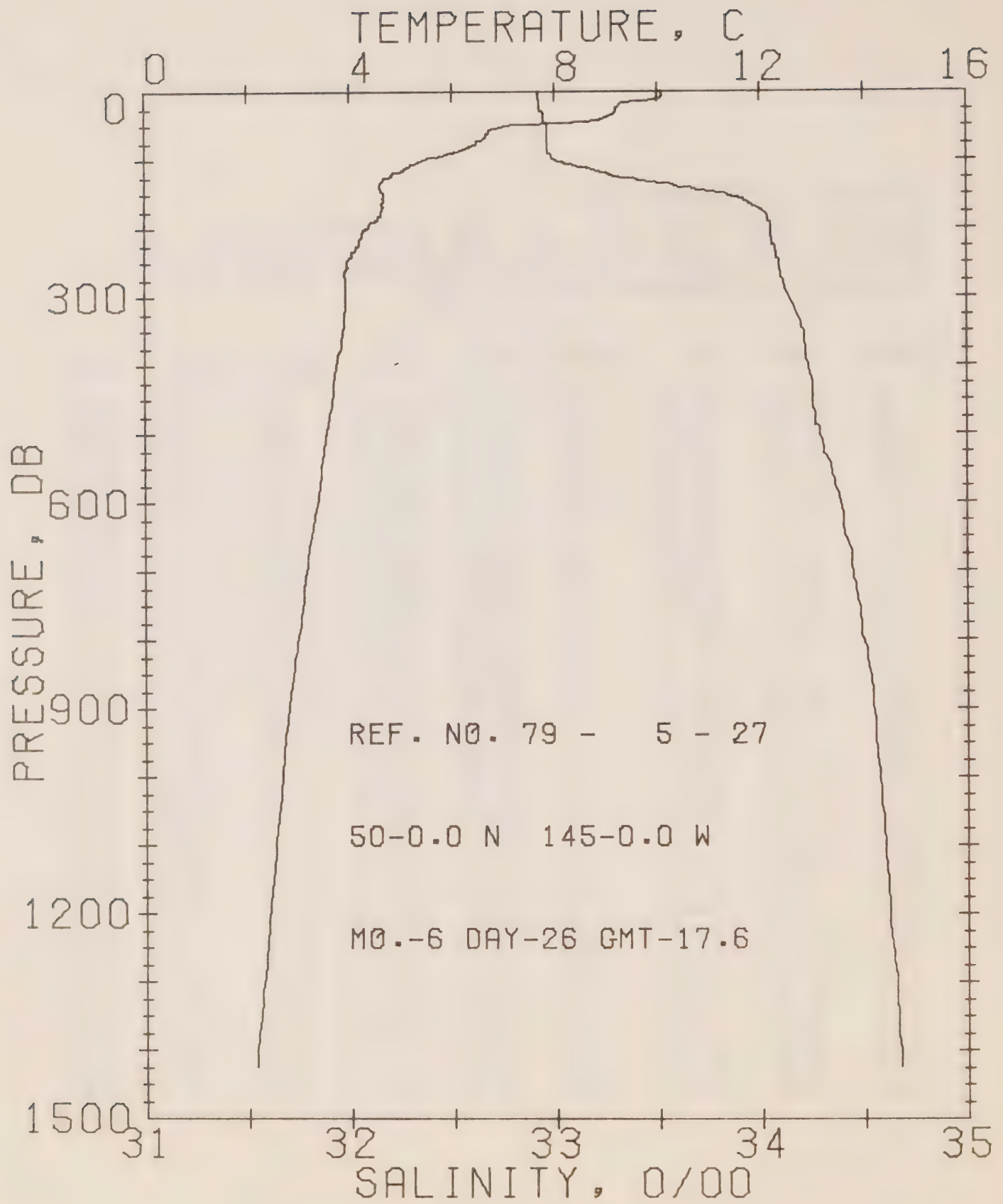
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.66	32.94	0	25.42	256.3	.00	.00	1487.
10	9.66	32.94	10	25.42	256.5	.26	.01	1487.
20	9.20	32.94	20	25.50	249.6	.51	.05	1485.
30	9.13	32.94	30	25.51	248.7	.76	.12	1485.
50	6.88	32.95	50	25.85	217.0	1.24	.31	1477.
75	6.19	32.95	75	25.93	208.7	1.77	.65	1474.
100	5.59	33.03	99	26.07	195.9	2.28	1.10	1472.
125	4.68	33.45	124	26.51	154.7	2.72	1.61	1470.
150	4.70	33.71	149	26.71	135.6	3.08	2.11	1470.
175	4.72	33.97	174	26.91	116.7	3.39	2.62	1471.
200	4.56	34.05	199	26.99	109.6	3.67	3.16	1471.
225	4.32	34.07	223	27.04	105.4	3.94	3.74	1471.
250	4.12	34.09	248	27.07	101.9	4.20	4.37	1470.
300	3.95	34.12	298	27.12	98.3	4.70	5.77	1470.
400	3.70	34.23	397	27.23	88.2	5.63	9.08	1471.
500	3.53	34.31	496	27.31	81.1	6.48	12.95	1472.
600	3.36	34.39	595	27.39	74.2	7.26	17.31	1473.
800	2.97	34.51	793	27.52	63.1	8.61	26.96	1475.
1000	2.67	34.58	990	27.60	56.0	9.80	37.83	1477.
1200	2.38	34.64	1188	27.67	49.4	10.85	49.53	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 27 DATE 26/ 6/79
 POSITION 50- .0N, 145- .0W GMT 17.6 STATION P
 RESULTS OF STP CAST 191 POINTS TAKEN FROM ANALOG TRACE
 GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.09	32.92	0	25.34	264.6	.00	.00	1488.
10	10.06	32.92	10	25.34	264.3	.26	.01	1488.
20	9.24	32.93	20	25.48	251.0	.52	.05	1485.
30	9.18	32.94	30	25.50	249.5	.77	.12	1485.
40	8.87	32.95	40	25.56	244.3	1.02	.20	1484.
50	7.01	32.97	50	25.84	217.1	1.25	.31	1477.
60	6.71	32.97	60	25.88	213.4	1.47	.43	1476.
70	6.60	32.97	70	25.90	212.1	1.68	.57	1476.
80	6.36	32.97	79	25.93	209.3	1.89	.73	1475.
90	5.96	32.97	89	25.98	204.6	2.10	.91	1474.
100	5.44	33.00	99	26.06	196.5	2.30	1.11	1472.
110	5.11	33.12	109	26.20	183.9	2.49	1.31	1471.
120	4.84	33.25	119	26.33	171.3	2.67	1.52	1470.
130	4.63	33.43	129	26.50	155.7	2.83	1.73	1470.
140	4.58	33.63	139	26.66	140.3	2.98	1.93	1470.
150	4.68	33.84	149	26.82	125.7	3.11	2.13	1471.
160	4.66	33.93	159	26.89	118.8	3.23	2.32	1471.
170	4.64	33.99	169	26.94	114.5	3.35	2.52	1471.
180	4.61	34.03	179	26.98	110.7	3.46	2.72	1471.
190	4.44	34.04	189	27.00	108.5	3.57	2.92	1471.
200	4.35	34.05	199	27.02	106.9	3.68	3.14	1470.
210	4.24	34.05	208	27.03	105.9	3.78	3.36	1470.
220	4.19	34.06	218	27.04	104.7	3.89	3.59	1470.
230	4.12	34.07	228	27.06	103.3	3.99	3.83	1470.
240	4.05	34.08	238	27.07	101.9	4.10	4.07	1470.
250	3.95	34.09	248	27.09	100.2	4.20	4.32	1470.
260	3.93	34.09	258	27.09	100.1	4.30	4.58	1470.
270	3.90	34.10	268	27.10	99.2	4.40	4.85	1470.
280	3.91	34.11	278	27.11	98.3	4.49	5.13	1470.
290	3.92	34.12	288	27.12	97.9	4.59	5.41	1470.
300	3.92	34.14	298	27.13	96.6	4.69	5.71	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 27

DATE 26/ 6/79

POSITION 50- .0N, 145- .0W

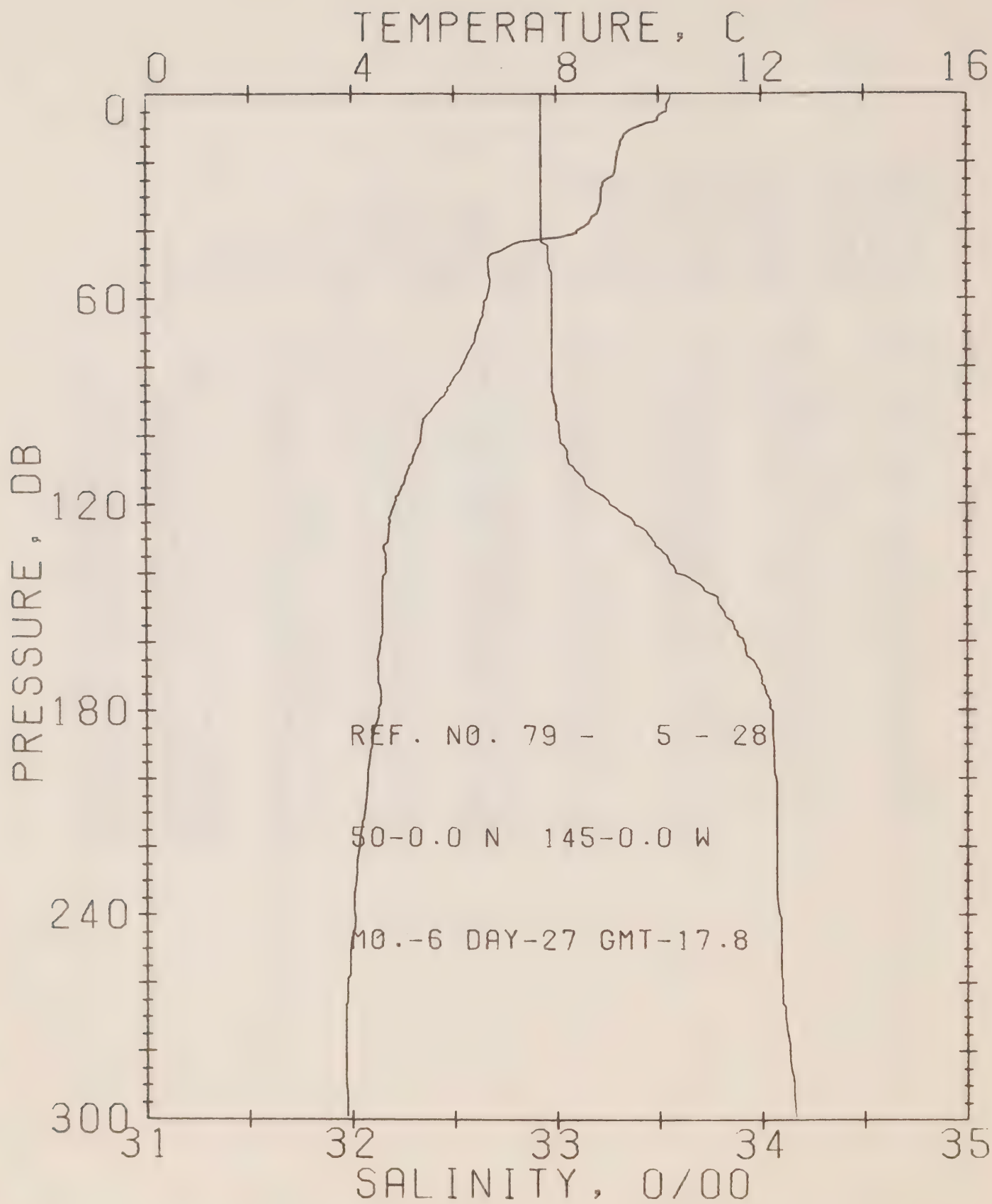
GMT 17.6

STATION P

RESULTS OF STP CAST 316 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.09	32.92	0	25.34	264.6	.00	.00	1488.
10	10.06	32.92	10	25.34	264.3	.26	.01	1488.
20	9.24	32.93	20	25.48	251.0	.52	.05	1485.
30	9.18	32.94	30	25.50	249.5	.77	.12	1485.
50	7.01	32.97	50	25.84	217.1	1.25	.31	1477.
75	6.47	32.97	75	25.91	210.6	1.79	.65	1476.
100	5.44	33.00	99	26.06	196.5	2.30	1.11	1472.
125	4.73	33.35	124	26.42	162.7	2.75	1.62	1470.
150	4.68	33.84	149	26.82	125.7	3.11	2.13	1471.
175	4.62	34.01	174	26.96	112.3	3.41	2.62	1471.
200	4.35	34.05	199	27.02	106.9	3.68	3.14	1470.
225	4.16	34.07	223	27.05	104.0	3.94	3.71	1470.
250	3.95	34.09	248	27.09	100.2	4.20	4.32	1470.
300	3.92	34.14	298	27.13	96.6	4.69	5.71	1470.
400	3.74	34.23	397	27.22	88.8	5.61	8.99	1471.
500	3.53	34.29	496	27.29	83.0	6.47	12.94	1472.
600	3.37	34.39	595	27.38	74.7	7.26	17.35	1473.
800	2.98	34.50	793	27.51	64.0	8.64	27.15	1475.
1000	2.66	34.57	990	27.59	56.3	9.83	38.03	1477.
1200	2.42	34.62	1188	27.66	51.2	10.90	50.03	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 28

DATE 27/ 6/79

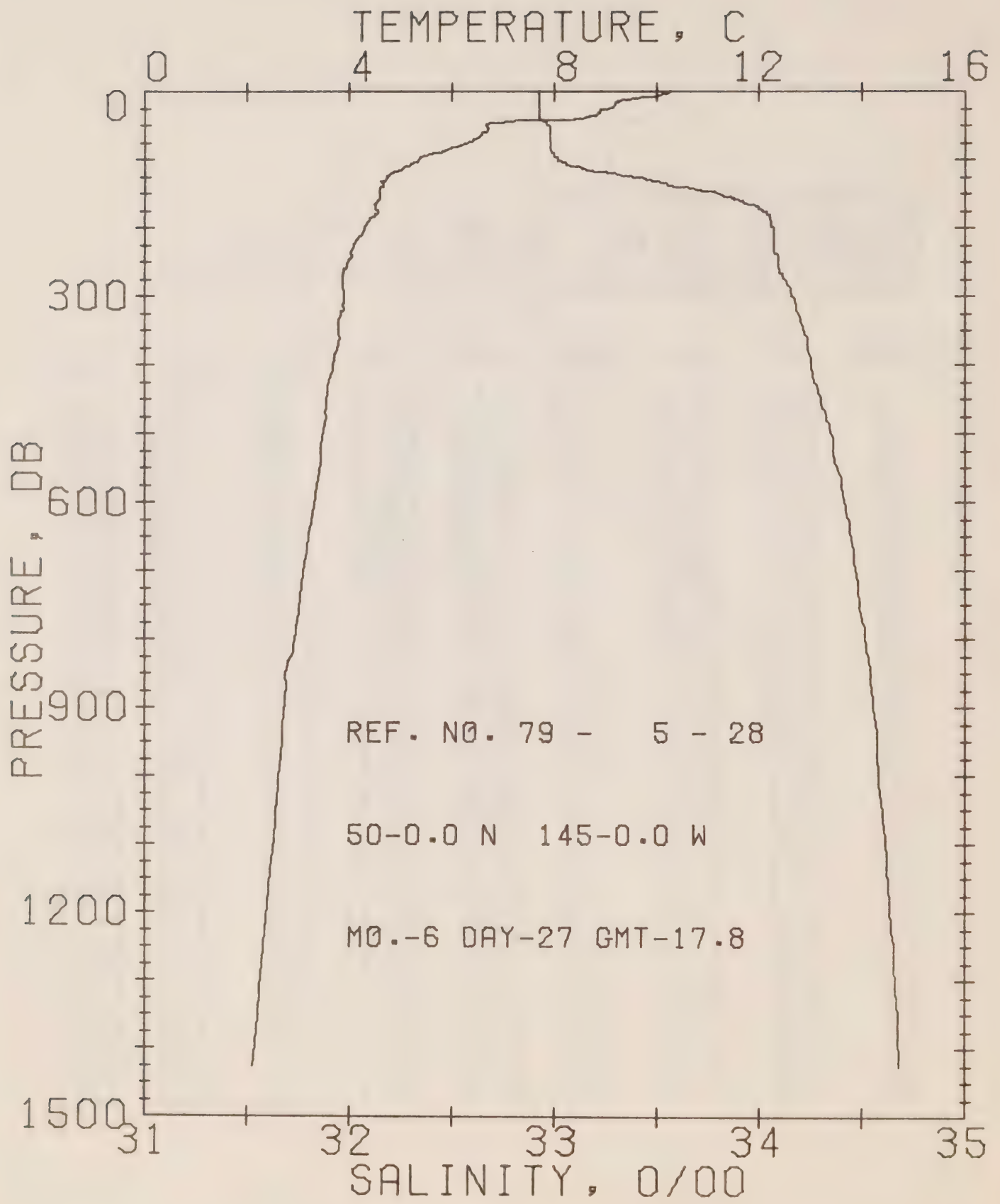
POSITION 50- .0N, 145- .0W GMT 17.8

STATION P

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.27	32.93	0	25.31	266.8	.00	.00	1489.
10	9.58	32.93	10	25.43	256.0	.26	.01	1486.
20	9.18	32.93	20	25.49	250.1	.51	.05	1485.
30	8.88	32.93	30	25.54	245.8	.76	.11	1484.
40	8.40	32.93	40	25.61	238.9	1.01	.20	1482.
50	6.67	32.97	50	25.89	212.8	1.23	.30	1476.
60	6.64	32.98	60	25.90	211.8	1.44	.42	1476.
70	6.44	32.98	70	25.93	209.5	1.65	.56	1475.
80	6.15	32.98	79	25.96	206.0	1.86	.72	1474.
90	5.69	32.99	89	26.03	199.6	2.06	.90	1473.
100	5.36	33.01	99	26.09	194.4	2.26	1.09	1471.
110	5.10	33.09	109	26.18	186.0	2.45	1.29	1471.
120	4.83	33.26	119	26.34	170.5	2.63	1.50	1470.
130	4.70	33.47	129	26.52	153.6	2.79	1.70	1470.
140	4.66	33.58	139	26.61	144.9	2.94	1.91	1470.
150	4.58	33.80	149	26.80	127.2	3.07	2.11	1470.
160	4.55	33.91	159	26.89	118.7	3.19	2.30	1470.
170	4.51	34.00	169	26.96	112.1	3.31	2.49	1470.
180	4.52	34.05	179	27.00	108.6	3.42	2.69	1471.
190	4.38	34.06	189	27.02	106.5	3.53	2.90	1470.
200	4.30	34.07	199	27.04	105.2	3.63	3.11	1470.
210	4.22	34.07	208	27.05	104.2	3.74	3.32	1470.
220	4.11	34.07	218	27.06	103.1	3.84	3.55	1470.
230	4.06	34.07	228	27.06	102.6	3.94	3.79	1470.
240	4.03	34.09	238	27.08	101.4	4.05	4.03	1470.
250	3.96	34.09	248	27.09	100.3	4.15	4.28	1470.
260	3.90	34.10	258	27.10	99.0	4.25	4.54	1469.
270	3.88	34.11	268	27.11	98.2	4.35	4.81	1470.
280	3.87	34.13	278	27.13	96.7	4.44	5.08	1470.
290	3.88	34.15	288	27.15	95.4	4.54	5.36	1470.
300	3.90	34.16	298	27.15	94.7	4.63	5.65	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 28

DATE 27/ 6/79

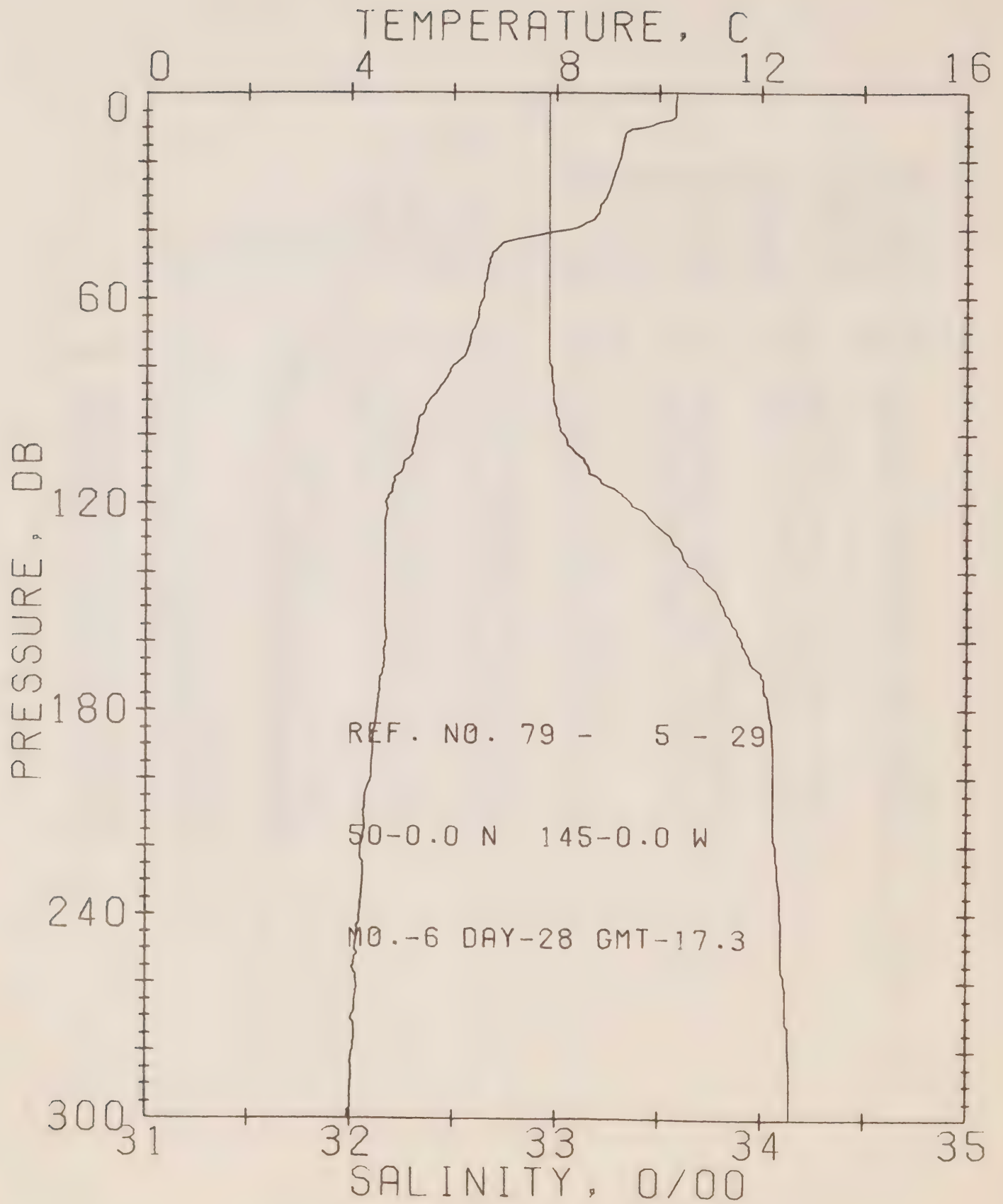
POSITION 50- .0N, 145- .0W GMT 17.8

STATION P

RESULTS OF STP CAST 280 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.27	32.93	0	25.31	266.8	.00	.00	1489.
10	9.58	32.93	10	25.43	256.0	.26	.01	1486.
20	9.18	32.93	20	25.49	250.1	.51	.05	1485.
30	8.88	32.93	30	25.54	245.8	.76	.11	1484.
50	6.67	32.97	50	25.89	212.8	1.23	.30	1476.
75	6.31	32.98	75	25.94	208.0	1.76	.64	1475.
100	5.36	33.01	99	26.09	194.4	2.26	1.09	1471.
125	4.74	33.38	124	26.44	160.5	2.71	1.60	1470.
150	4.58	33.80	149	26.80	127.2	3.07	2.11	1470.
175	4.56	34.02	174	26.97	111.2	3.36	2.59	1471.
200	4.30	34.07	199	27.04	105.2	3.63	3.11	1470.
225	4.08	34.07	223	27.06	102.9	3.89	3.67	1470.
250	3.96	34.09	248	27.09	100.3	4.15	4.28	1470.
300	3.90	34.16	298	27.15	94.7	4.63	5.65	1470.
400	3.69	34.25	397	27.24	86.8	5.54	8.87	1471.
500	3.48	34.35	496	27.34	78.0	6.36	12.63	1472.
600	3.32	34.42	595	27.41	72.1	7.11	16.84	1473.
800	2.94	34.51	793	27.52	62.3	8.45	26.34	1475.
1000	2.62	34.58	990	27.61	55.2	9.61	36.96	1477.
1200	2.38	34.63	1188	27.67	49.8	10.65	48.67	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 29

DATE 28/ 6/79

POSITION 50- .0N, 145- .0W

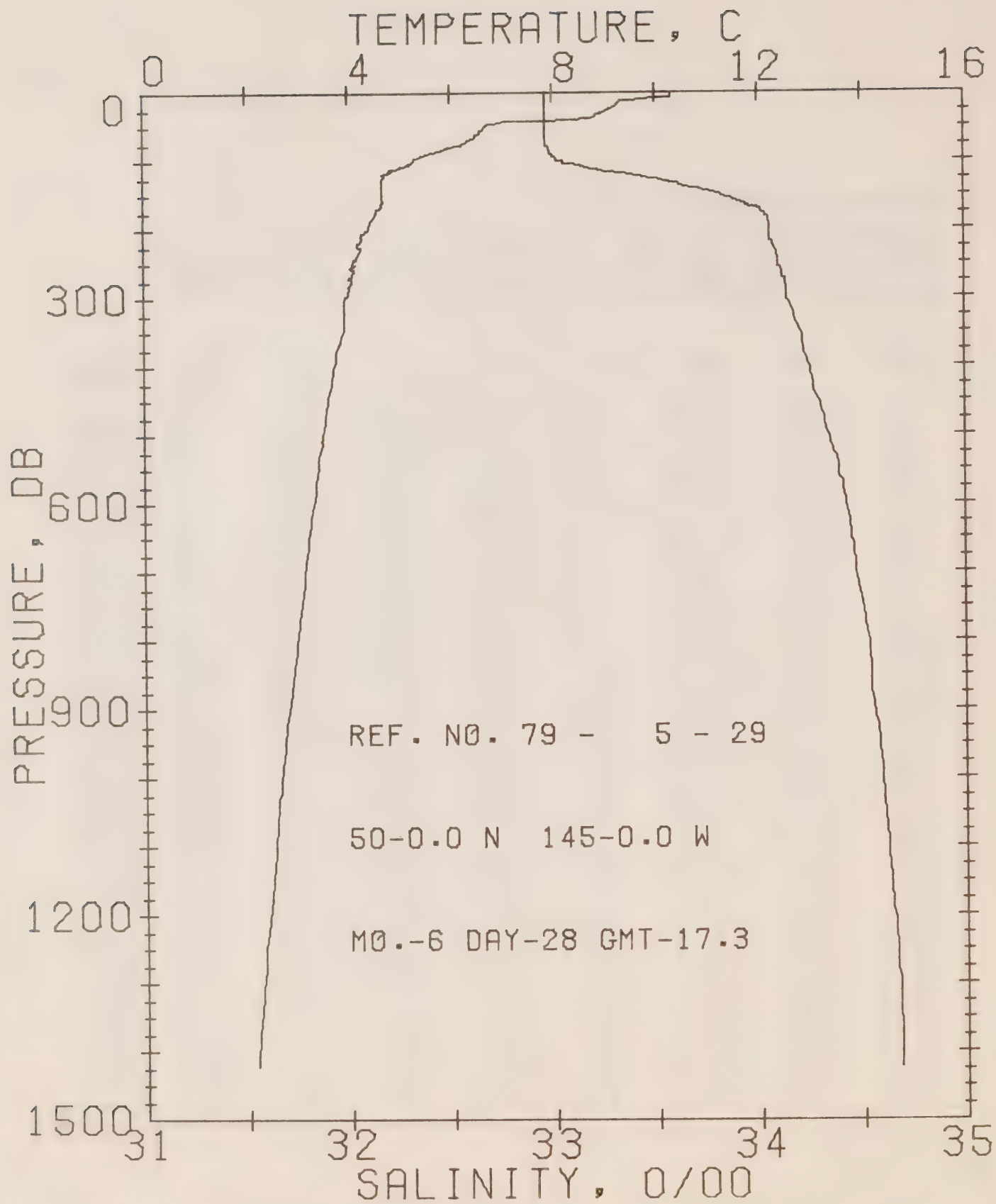
GMT 17.3

STATION P

RESULTS OF STP CAST 198 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.34	32.97	0	25.33	264.9	.00	.00	1489.
10	9.78	32.97	10	25.43	256.2	.26	.01	1487.
20	9.23	32.97	20	25.52	247.8	.51	.05	1485.
30	8.98	32.97	30	25.56	244.2	.76	.11	1484.
40	8.25	32.97	40	25.67	233.8	1.00	.20	1482.
50	6.69	32.97	50	25.89	213.1	1.22	.30	1476.
60	6.58	32.97	60	25.90	211.8	1.43	.42	1476.
70	6.36	32.97	70	25.93	209.2	1.64	.56	1475.
80	5.98	32.98	79	25.98	204.0	1.85	.72	1474.
90	5.53	32.99	89	26.05	198.1	2.05	.89	1472.
100	5.27	33.04	99	26.12	191.5	2.24	1.08	1471.
110	5.00	33.16	109	26.24	179.7	2.43	1.28	1470.
120	4.68	33.37	119	26.44	160.6	2.60	1.48	1469.
130	4.67	33.56	129	26.59	146.4	2.75	1.67	1470.
140	4.67	33.69	139	26.70	136.3	2.90	1.87	1470.
150	4.68	33.82	149	26.80	127.2	3.03	2.06	1471.
160	4.69	33.91	159	26.87	120.7	3.15	2.26	1471.
170	4.61	34.00	169	26.95	113.2	3.27	2.46	1471.
180	4.52	34.04	179	26.99	109.5	3.38	2.65	1471.
190	4.43	34.06	189	27.01	107.2	3.49	2.86	1470.
200	4.39	34.06	199	27.02	106.6	3.60	3.07	1470.
210	4.24	34.06	208	27.04	105.1	3.70	3.29	1470.
220	4.19	34.07	218	27.05	103.9	3.81	3.52	1470.
230	4.24	34.08	228	27.05	103.6	3.91	3.76	1470.
240	4.17	34.09	238	27.07	102.4	4.01	4.01	1470.
250	4.09	34.10	248	27.08	100.9	4.11	4.26	1470.
260	4.11	34.11	258	27.09	100.5	4.22	4.52	1470.
270	4.02	34.12	268	27.11	98.9	4.31	4.79	1470.
280	4.05	34.13	278	27.11	98.5	4.41	5.07	1470.
290	4.00	34.14	288	27.13	97.3	4.51	5.35	1470.
300	3.95	34.14	298	27.13	96.9	4.61	5.64	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 29

DATE 28/ 6/79

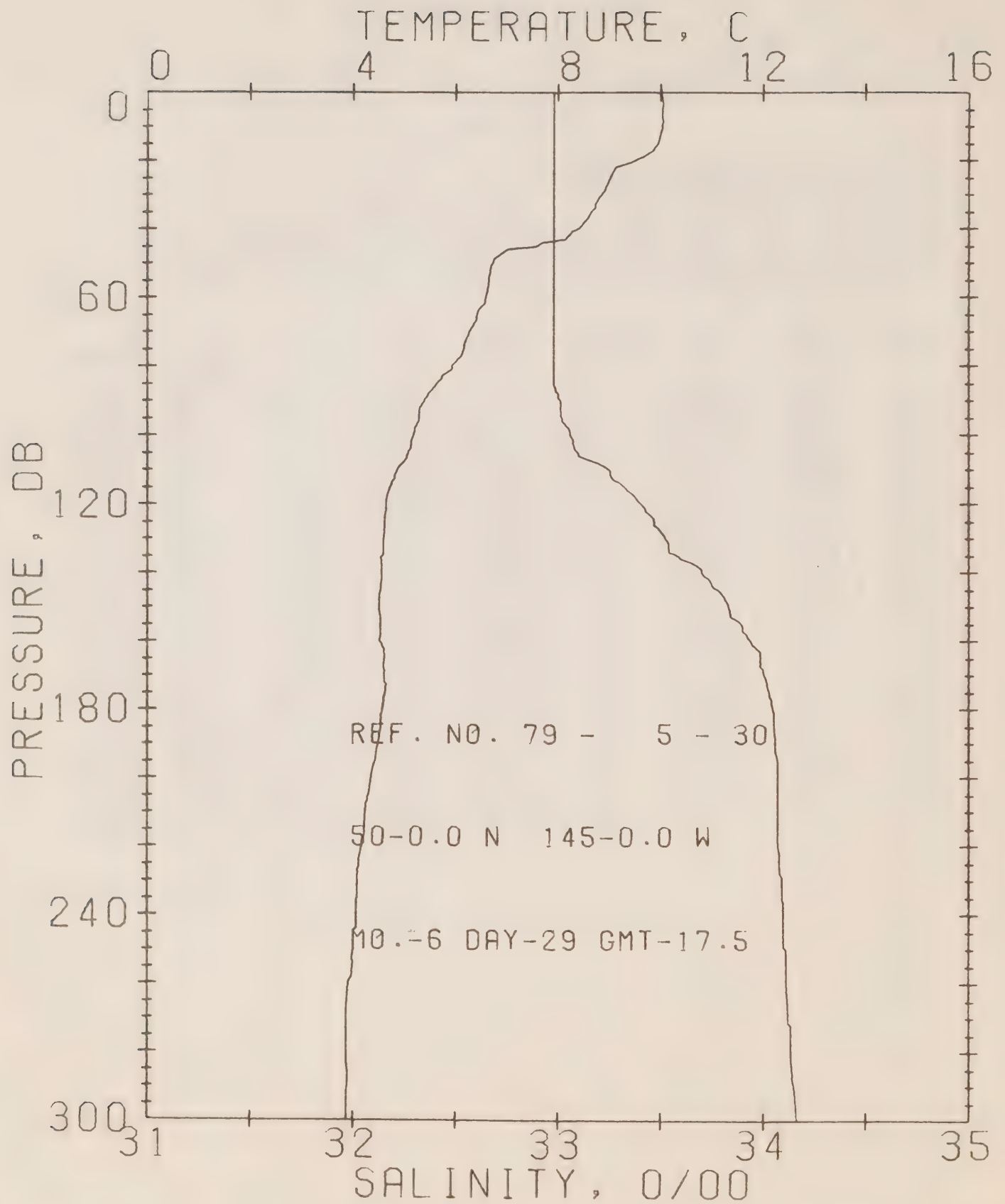
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 306 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.34	32.97	0	25.33	264.9	.00	.00	1489.
10	9.78	32.97	10	25.43	256.2	.26	.01	1487.
20	9.23	32.97	20	25.52	247.8	.51	.05	1485.
30	8.98	32.97	30	25.56	244.2	.76	.11	1484.
50	6.69	32.97	50	25.89	213.1	1.22	.30	1476.
75	6.27	32.97	75	25.94	208.2	1.75	.64	1475.
100	5.27	33.04	99	26.12	191.5	2.24	1.08	1471.
125	4.68	33.47	124	26.52	153.2	2.68	1.58	1470.
150	4.68	33.82	149	26.80	127.2	3.03	2.06	1471.
175	4.56	34.02	174	26.97	111.2	3.33	2.56	1471.
200	4.39	34.06	199	27.02	106.6	3.60	3.07	1470.
225	4.23	34.08	223	27.05	103.7	3.86	3.64	1470.
250	4.09	34.10	248	27.08	100.9	4.11	4.26	1470.
300	3.95	34.14	298	27.13	96.9	4.61	5.64	1470.
400	3.73	34.25	397	27.24	87.5	5.53	8.93	1471.
500	3.50	34.34	496	27.33	78.9	6.36	12.74	1472.
600	3.31	34.42	595	27.42	71.7	7.11	16.93	1473.
800	2.97	34.53	793	27.53	61.6	8.44	26.38	1475.
1000	2.64	34.59	990	27.61	54.7	9.60	37.03	1477.
1200	2.41	34.65	1188	27.68	49.1	10.64	48.66	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 30

DATE 29/ 6/79

POSITION 50- .0N, 145- .0W

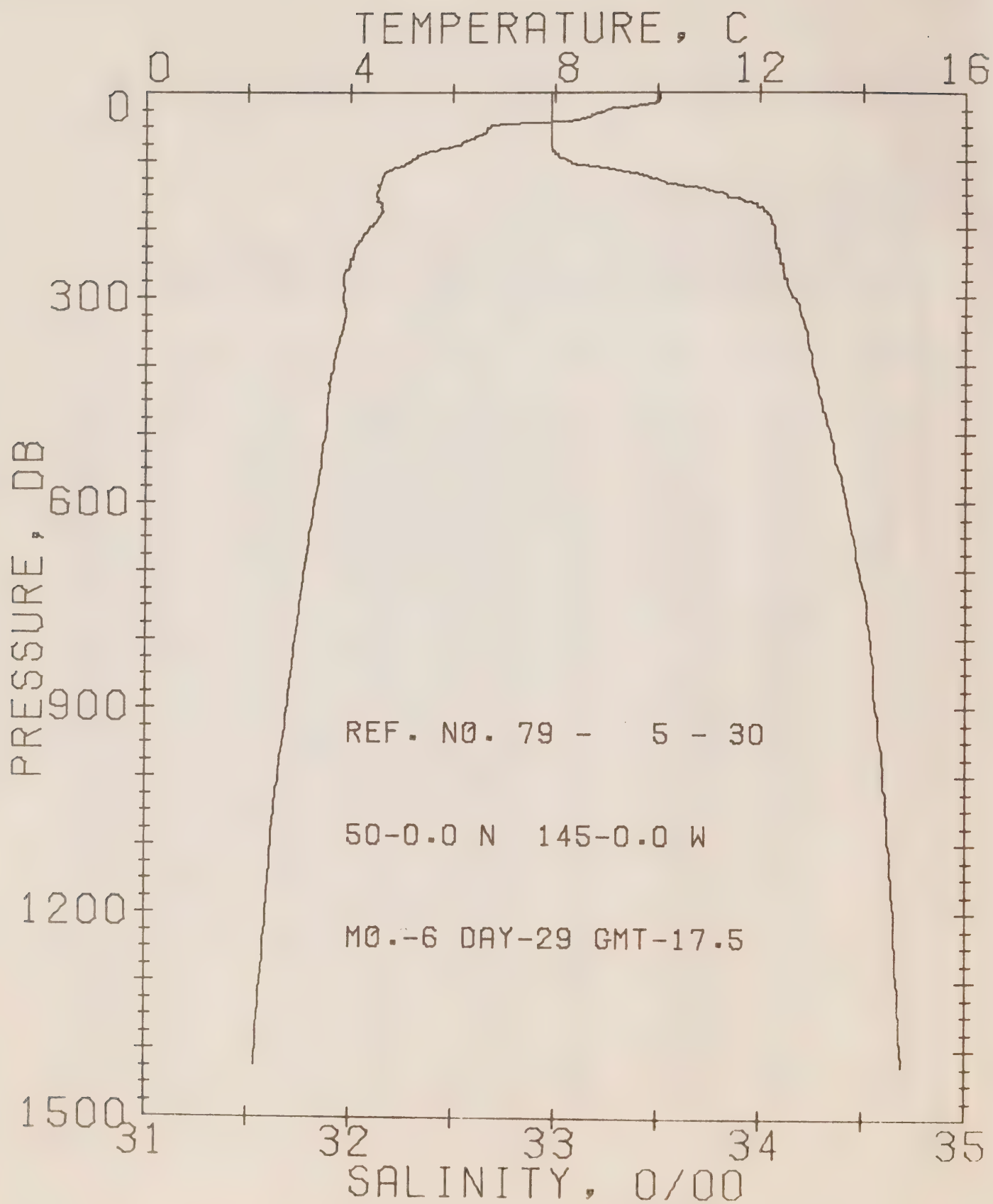
GMT 17.5

STATION P

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.04	32.98	0	25.39	259.4	.00	.00	1488.
10	10.03	32.98	10	25.39	259.4	.26	.01	1488.
20	9.53	32.98	20	25.48	251.7	.52	.05	1486.
30	8.86	32.98	30	25.58	241.8	.76	.11	1484.
40	8.41	32.98	40	25.65	235.4	1.00	.20	1483.
50	6.71	32.98	50	25.89	212.6	1.22	.30	1476.
60	6.59	32.98	60	25.91	211.2	1.43	.42	1476.
70	6.28	32.98	70	25.95	207.5	1.64	.56	1475.
80	5.93	32.98	79	25.99	203.4	1.85	.72	1473.
90	5.38	33.01	89	26.08	194.9	2.05	.89	1471.
100	5.16	33.06	99	26.14	188.8	2.24	1.08	1471.
110	4.86	33.25	109	26.33	171.4	2.43	1.27	1470.
120	4.64	33.40	119	26.48	157.6	2.59	1.47	1469.
130	4.60	33.53	129	26.58	148.0	2.74	1.66	1469.
140	4.55	33.70	139	26.72	134.7	2.89	1.86	1470.
150	4.52	33.84	149	26.83	124.4	3.01	2.05	1470.
160	4.52	33.94	159	26.91	116.6	3.13	2.24	1470.
170	4.62	34.01	169	26.95	112.8	3.25	2.43	1471.
180	4.57	34.05	179	26.99	109.3	3.36	2.63	1471.
190	4.48	34.06	189	27.01	107.4	3.47	2.83	1471.
200	4.35	34.07	199	27.03	105.4	3.57	3.04	1470.
210	4.23	34.07	208	27.05	104.3	3.68	3.26	1470.
220	4.15	34.07	218	27.05	103.5	3.78	3.49	1470.
230	4.09	34.09	228	27.08	101.5	3.89	3.72	1470.
240	4.05	34.10	238	27.09	100.4	3.99	3.97	1470.
250	3.99	34.11	248	27.10	99.1	4.09	4.22	1470.
260	3.90	34.11	258	27.11	98.3	4.19	4.47	1469.
270	3.88	34.12	268	27.12	97.4	4.28	4.74	1470.
280	3.87	34.13	278	27.13	96.7	4.38	5.01	1470.
290	3.88	34.14	288	27.14	95.8	4.48	5.29	1470.
300	3.88	34.16	298	27.15	94.7	4.57	5.57	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 30

DATE 29/ 6/79

POSITION 50- .0N, 145- .0W

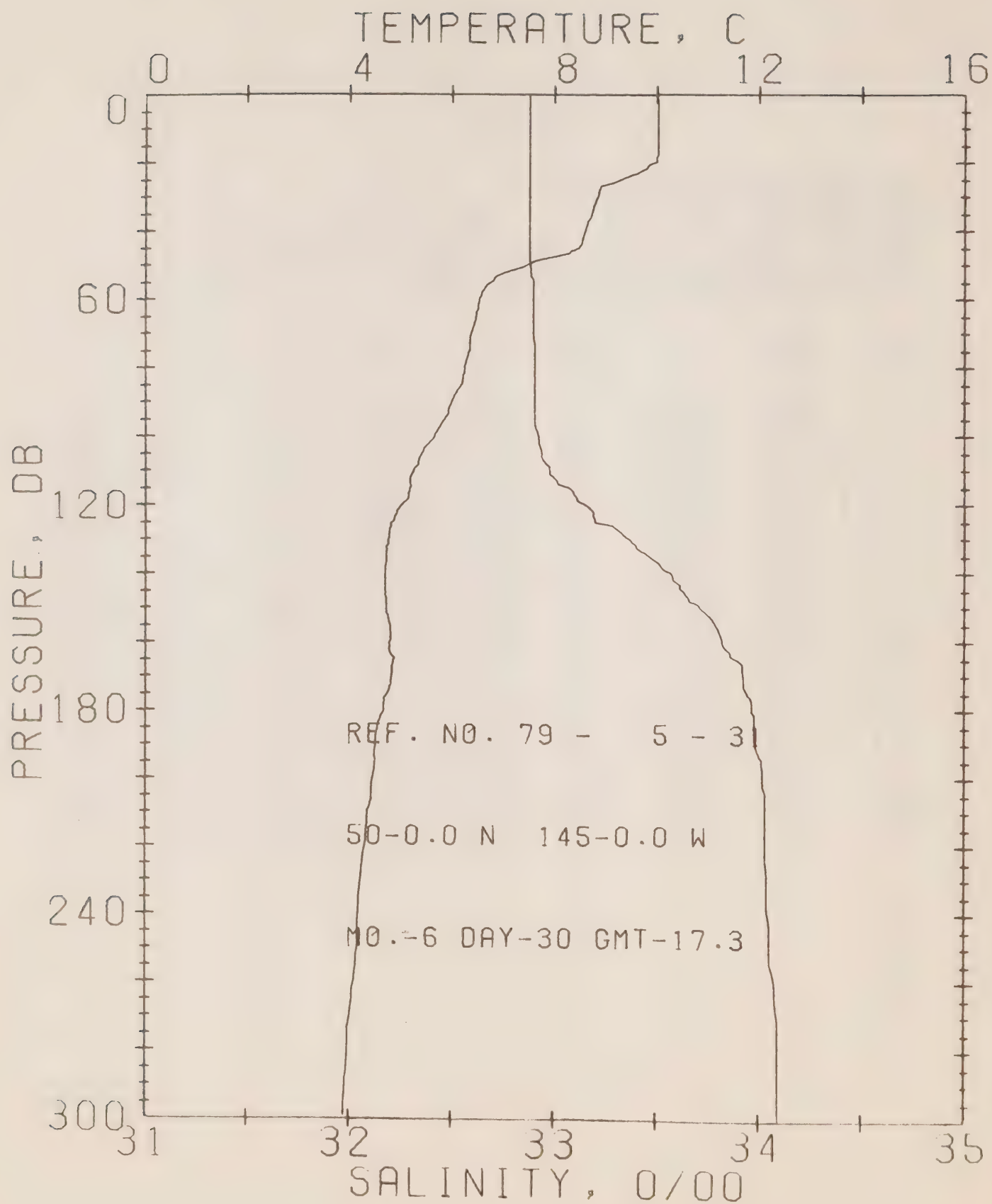
GMT 17.5

STATION P

RESULTS OF STP CAST 288 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.04	32.98	0	25.39	259.4	.00	.00	1488.
10	10.03	32.98	10	25.39	259.4	.26	.01	1488.
20	9.53	32.98	20	25.48	251.7	.52	.05	1486.
30	8.86	32.98	30	25.58	241.8	.76	.11	1484.
50	6.71	32.98	50	25.89	212.6	1.22	.30	1476.
75	6.17	32.98	75	25.96	206.2	1.75	.64	1474.
100	5.16	33.06	99	26.14	188.8	2.24	1.08	1471.
125	4.61	33.47	124	26.53	152.4	2.67	1.56	1469.
150	4.52	33.84	149	26.83	124.4	3.01	2.05	1470.
175	4.62	34.03	174	26.97	111.3	3.31	2.53	1471.
200	4.35	34.07	199	27.03	105.4	3.57	3.04	1470.
225	4.11	34.08	223	27.07	102.4	3.84	3.61	1470.
250	3.99	34.11	248	27.10	99.1	4.09	4.22	1470.
300	3.88	34.16	298	27.15	94.7	4.57	5.57	1470.
400	3.69	34.25	397	27.25	86.6	5.47	8.78	1471.
500	3.52	34.35	496	27.34	78.5	6.29	12.54	1472.
600	3.31	34.42	595	27.42	71.7	7.05	16.75	1473.
800	2.93	34.54	793	27.54	60.6	8.36	26.08	1475.
1000	2.61	34.60	990	27.62	53.6	9.51	36.59	1477.
1200	2.38	34.65	1188	27.68	48.7	10.53	48.00	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 31

DATE 30/ 6/79

POSITION 50- .0N, 145- .0W

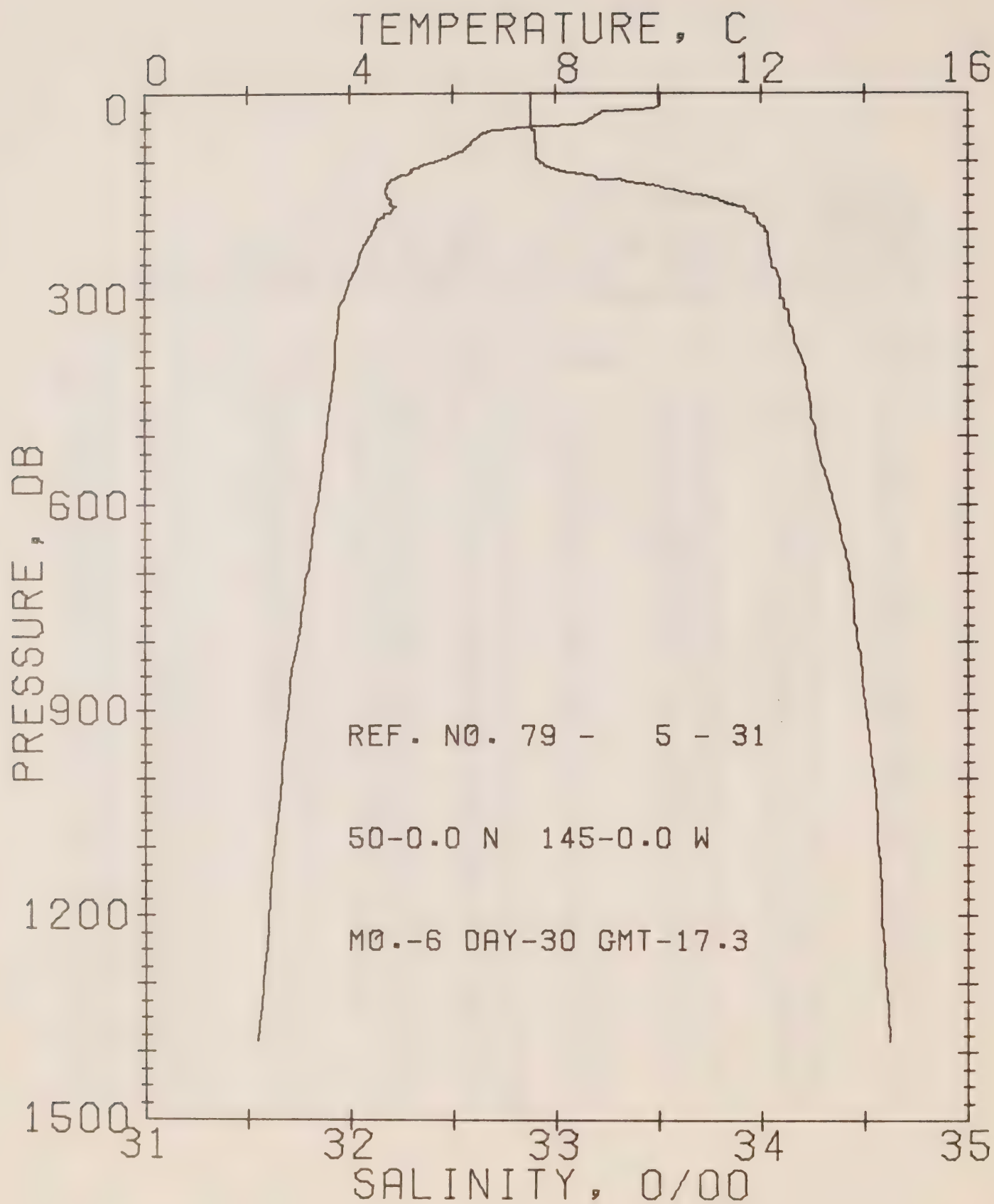
GMT 17.3

STATION P

RESULTS OF STP CAST 177 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.02	32.88	0	25.32	266.4	.00	.00	1488.
10	10.02	32.88	10	25.32	266.6	.27	.01	1488.
20	10.00	32.88	20	25.32	266.5	.53	.05	1488.
30	8.85	32.88	30	25.51	249.0	.79	.12	1484.
40	8.61	32.88	40	25.54	245.7	1.04	.21	1483.
50	7.50	32.88	50	25.71	229.9	1.28	.32	1479.
60	6.54	32.90	60	25.85	216.5	1.50	.44	1475.
70	6.37	32.90	70	25.87	214.6	1.71	.58	1475.
80	6.25	32.91	79	25.90	212.5	1.93	.75	1475.
90	6.00	32.91	89	25.93	209.6	2.14	.93	1474.
100	5.65	32.93	99	25.98	204.1	2.35	1.13	1473.
110	5.26	32.98	109	26.07	196.0	2.55	1.35	1471.
120	5.03	33.15	119	26.23	180.9	2.74	1.57	1471.
130	4.78	33.37	129	26.43	161.8	2.91	1.79	1470.
140	4.70	33.57	139	26.60	146.0	3.06	2.00	1470.
150	4.71	33.71	149	26.71	135.8	3.20	2.21	1471.
160	4.79	33.82	159	26.79	128.5	3.34	2.42	1471.
170	4.82	33.93	169	26.87	120.7	3.46	2.62	1472.
180	4.68	33.97	179	26.92	116.3	3.58	2.84	1471.
190	4.50	33.98	189	26.95	113.4	3.69	3.05	1471.
200	4.46	34.02	199	26.98	110.3	3.80	3.27	1471.
210	4.35	34.03	208	27.00	108.5	3.91	3.50	1470.
220	4.30	34.03	218	27.01	108.1	4.02	3.74	1470.
230	4.22	34.04	228	27.02	106.6	4.13	3.98	1470.
240	4.17	34.04	238	27.03	105.9	4.24	4.24	1470.
250	4.16	34.05	248	27.04	105.4	4.34	4.50	1470.
260	4.10	34.08	258	27.06	102.8	4.44	4.77	1470.
270	4.01	34.09	268	27.08	101.1	4.55	5.05	1470.
280	3.97	34.09	278	27.09	100.6	4.65	5.33	1470.
290	3.91	34.09	288	27.09	100.1	4.75	5.62	1470.
300	3.88	34.10	298	27.10	99.4	4.85	5.92	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 31

DATE 30/ 6/79

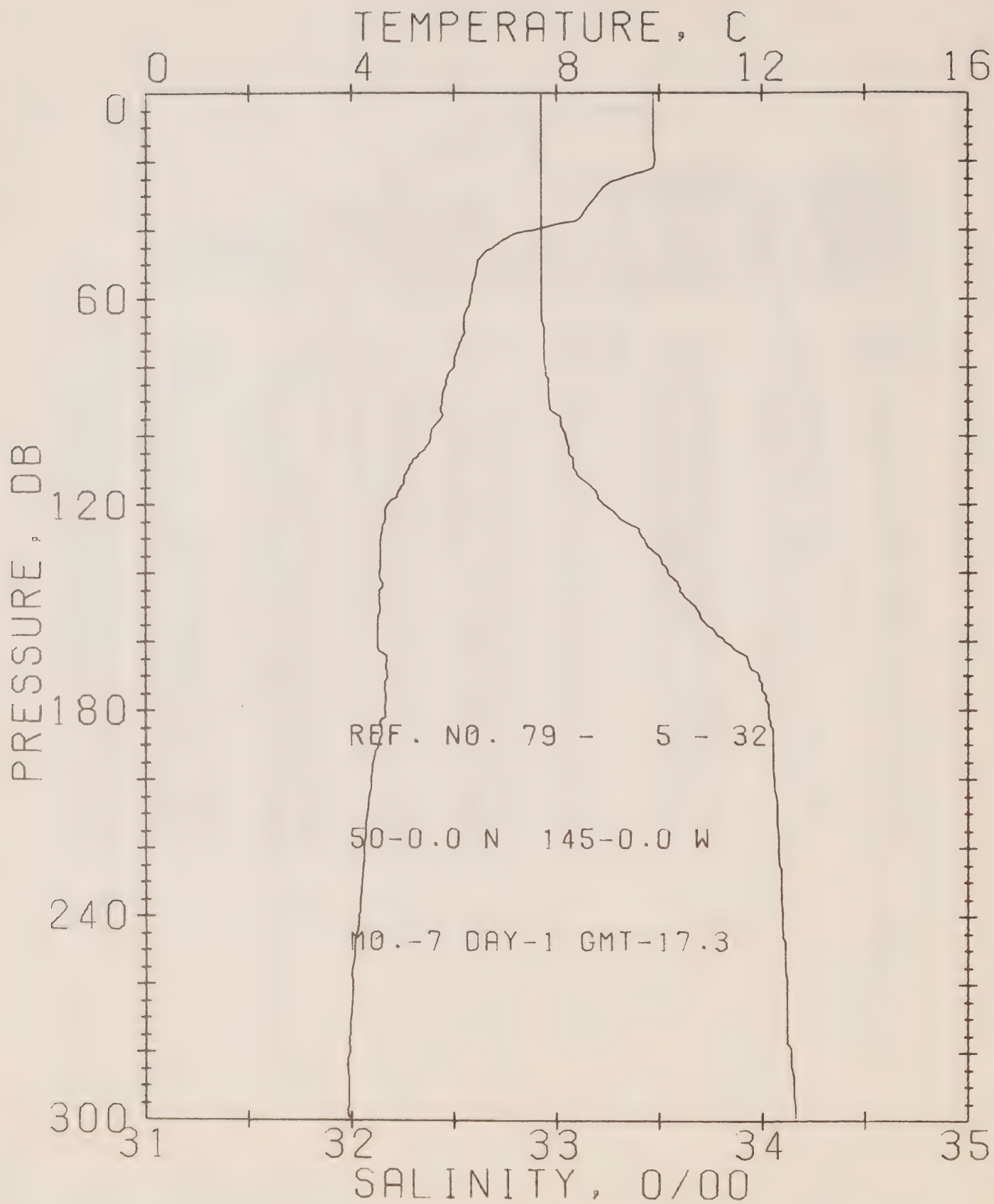
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 287 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.02	32.88	0	25.32	266.4	.00	.00	1488.
10	10.02	32.88	10	25.32	266.6	.27	.01	1488.
20	10.00	32.88	20	25.32	266.5	.53	.05	1488.
30	8.85	32.88	30	25.51	249.0	.79	.12	1484.
50	7.50	32.88	50	25.71	229.9	1.28	.32	1479.
75	6.34	32.91	75	25.88	213.5	1.82	.66	1475.
100	5.65	32.93	99	25.98	204.1	2.35	1.13	1473.
125	4.85	33.20	124	26.29	175.2	2.83	1.68	1470.
150	4.71	33.71	149	26.71	135.8	3.20	2.21	1471.
175	4.76	33.95	174	26.89	118.6	3.52	2.73	1471.
200	4.46	34.02	199	26.98	110.3	3.80	3.27	1471.
225	4.25	34.03	223	27.02	107.3	4.08	3.86	1470.
250	4.16	34.05	248	27.04	105.4	4.34	4.50	1470.
300	3.88	34.10	298	27.10	99.4	4.85	5.92	1470.
400	3.70	34.21	397	27.21	89.9	5.79	9.28	1471.
500	3.54	34.26	496	27.27	85.3	6.67	13.30	1472.
600	3.35	34.35	595	27.36	77.3	7.48	17.85	1473.
800	2.97	34.47	793	27.48	66.1	8.90	27.93	1475.
1000	2.65	34.54	990	27.57	58.3	10.14	39.27	1477.
1200	2.40	34.58	1188	27.62	53.9	11.25	51.77	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 32

DATE 1/ 7/79

POSITION 50- .0N, 145- .0W

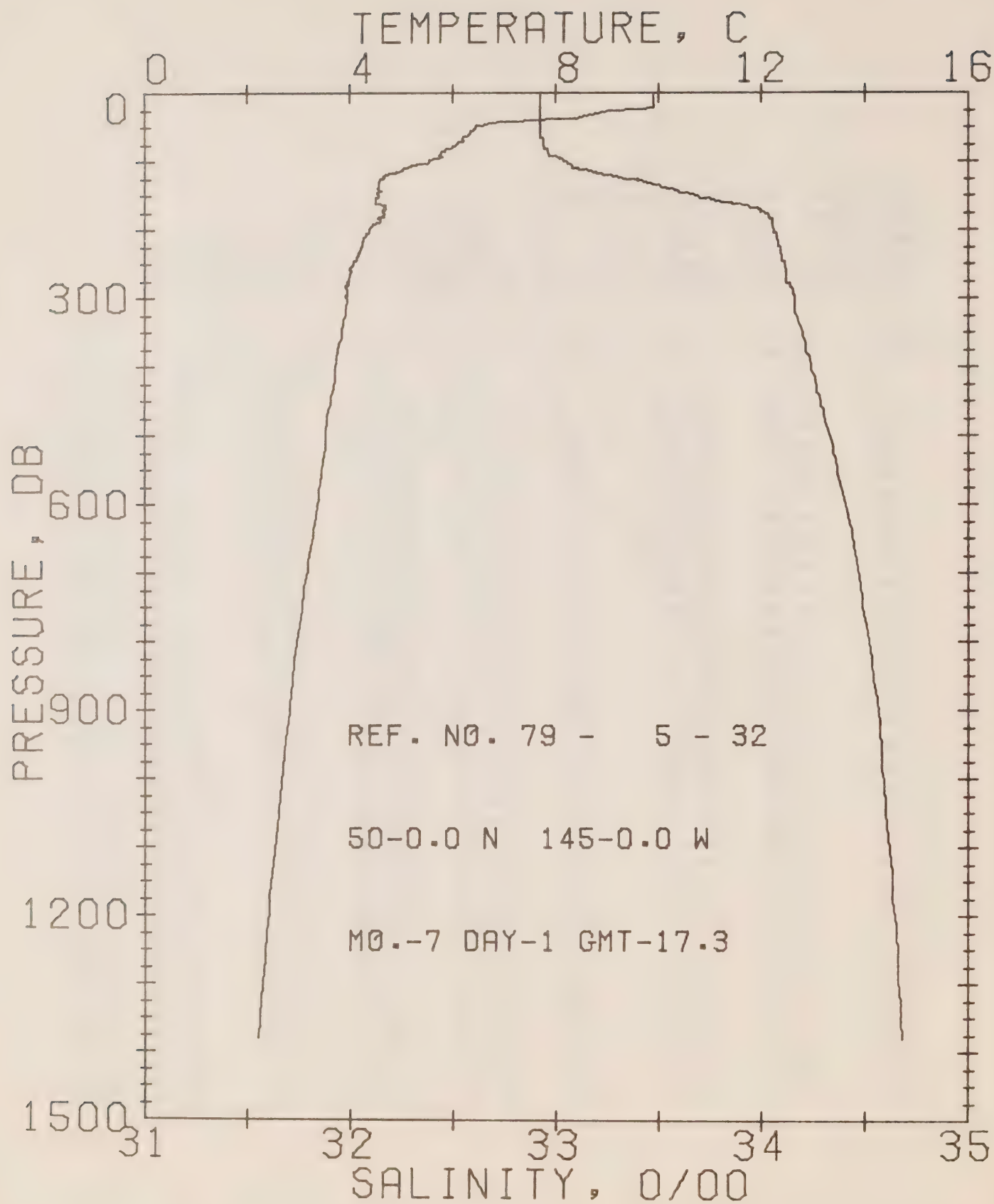
GMT 17.3

STATION P

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.90	32.93	0	25.38	260.8	.00	.00	1487.
10	9.90	32.93	10	25.38	261.0	.26	.01	1488.
20	9.91	32.93	20	25.37	261.4	.52	.05	1488.
30	8.77	32.93	30	25.56	244.1	.77	.12	1484.
40	7.52	32.93	40	25.74	226.7	1.01	.20	1479.
50	6.44	32.93	50	25.89	213.0	1.23	.30	1475.
60	6.32	32.93	60	25.90	211.5	1.44	.42	1475.
70	6.22	32.94	70	25.92	209.7	1.65	.56	1474.
80	6.00	32.95	79	25.96	206.5	1.86	.72	1474.
90	5.76	32.97	89	26.00	202.5	2.06	.90	1473.
100	5.54	33.04	99	26.09	194.4	2.26	1.09	1472.
110	5.10	33.09	109	26.18	186.0	2.45	1.29	1471.
120	4.69	33.23	119	26.33	171.2	2.63	1.50	1469.
130	4.57	33.43	129	26.50	155.0	2.79	1.71	1469.
140	4.54	33.54	139	26.59	146.6	2.95	1.91	1469.
150	4.55	33.68	149	26.70	136.3	3.09	2.12	1470.
160	4.52	33.82	159	26.82	125.6	3.22	2.33	1470.
170	4.70	33.99	169	26.93	114.9	3.34	2.53	1471.
180	4.64	34.03	179	26.97	111.3	3.45	2.73	1471.
190	4.53	34.05	189	27.00	108.8	3.56	2.94	1471.
200	4.38	34.06	199	27.02	106.5	3.67	3.16	1470.
210	4.31	34.07	208	27.04	105.1	3.77	3.38	1470.
220	4.25	34.08	218	27.05	103.8	3.88	3.61	1470.
230	4.19	34.09	228	27.07	102.5	3.98	3.84	1470.
240	4.14	34.10	238	27.08	101.3	4.08	4.09	1470.
250	4.05	34.11	248	27.10	99.8	4.18	4.34	1470.
260	4.02	34.12	258	27.11	98.8	4.28	4.60	1470.
270	3.99	34.12	268	27.11	98.5	4.38	4.86	1470.
280	3.97	34.14	278	27.13	96.9	4.48	5.14	1470.
290	3.95	34.15	288	27.14	96.1	4.58	5.42	1470.
300	3.94	34.16	298	27.15	95.3	4.67	5.70	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 32

DATE 1/ 7/79

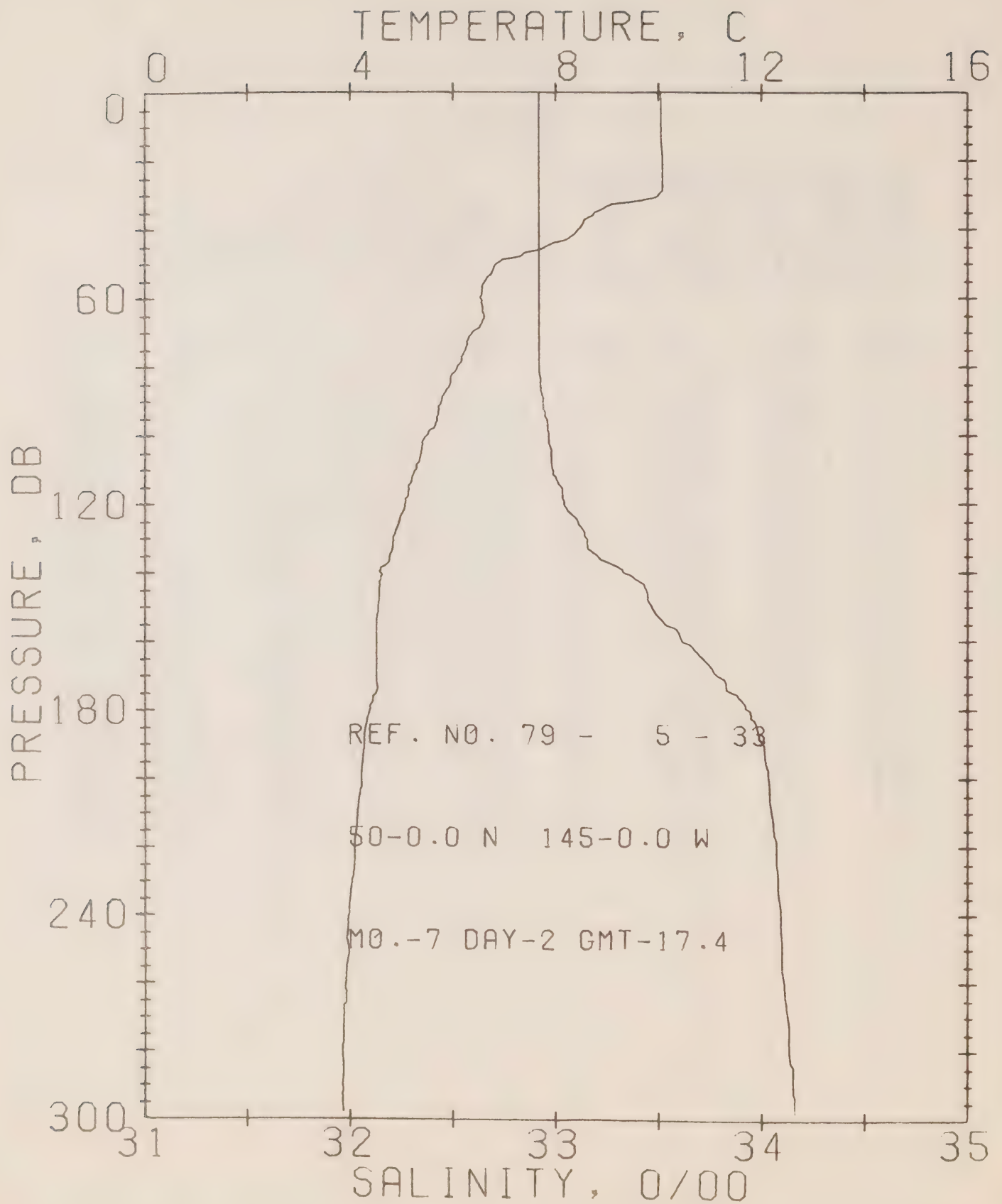
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST 257 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	9.90	32.93	0	25.38	260.8	.00	.00	1487.
10	9.90	32.93	10	25.38	261.0	.26	.01	1488.
20	9.91	32.93	20	25.37	261.4	.52	.05	1488.
30	8.77	32.93	30	25.56	244.1	.77	.12	1484.
50	6.44	32.93	50	25.89	213.0	1.23	.30	1475.
75	6.04	32.94	75	25.95	207.6	1.76	.64	1474.
100	5.54	33.04	99	26.09	194.4	2.26	1.09	1472.
125	4.65	33.34	124	26.42	162.6	2.72	1.61	1469.
150	4.55	33.68	149	26.70	136.3	3.09	2.12	1470.
175	4.66	34.02	174	26.96	112.3	3.40	2.63	1471.
200	4.38	34.06	199	27.02	106.5	3.67	3.16	1470.
225	4.23	34.09	223	27.06	103.2	3.93	3.72	1470.
250	4.05	34.11	248	27.10	99.8	4.18	4.34	1470.
300	3.94	34.16	298	27.15	95.3	4.67	5.70	1470.
400	3.72	34.24	397	27.23	88.1	5.59	8.98	1471.
500	3.53	34.33	496	27.32	80.0	6.43	12.83	1472.
600	3.36	34.41	595	27.40	73.0	7.20	17.11	1473.
800	2.97	34.52	793	27.53	62.1	8.54	26.66	1475.
1000	2.68	34.59	990	27.61	55.3	9.71	37.33	1477.
1200	2.41	34.64	1188	27.67	49.3	10.75	49.04	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 33

DATE 2/ 7/79

POSITION 50- .0N, 145- .0W

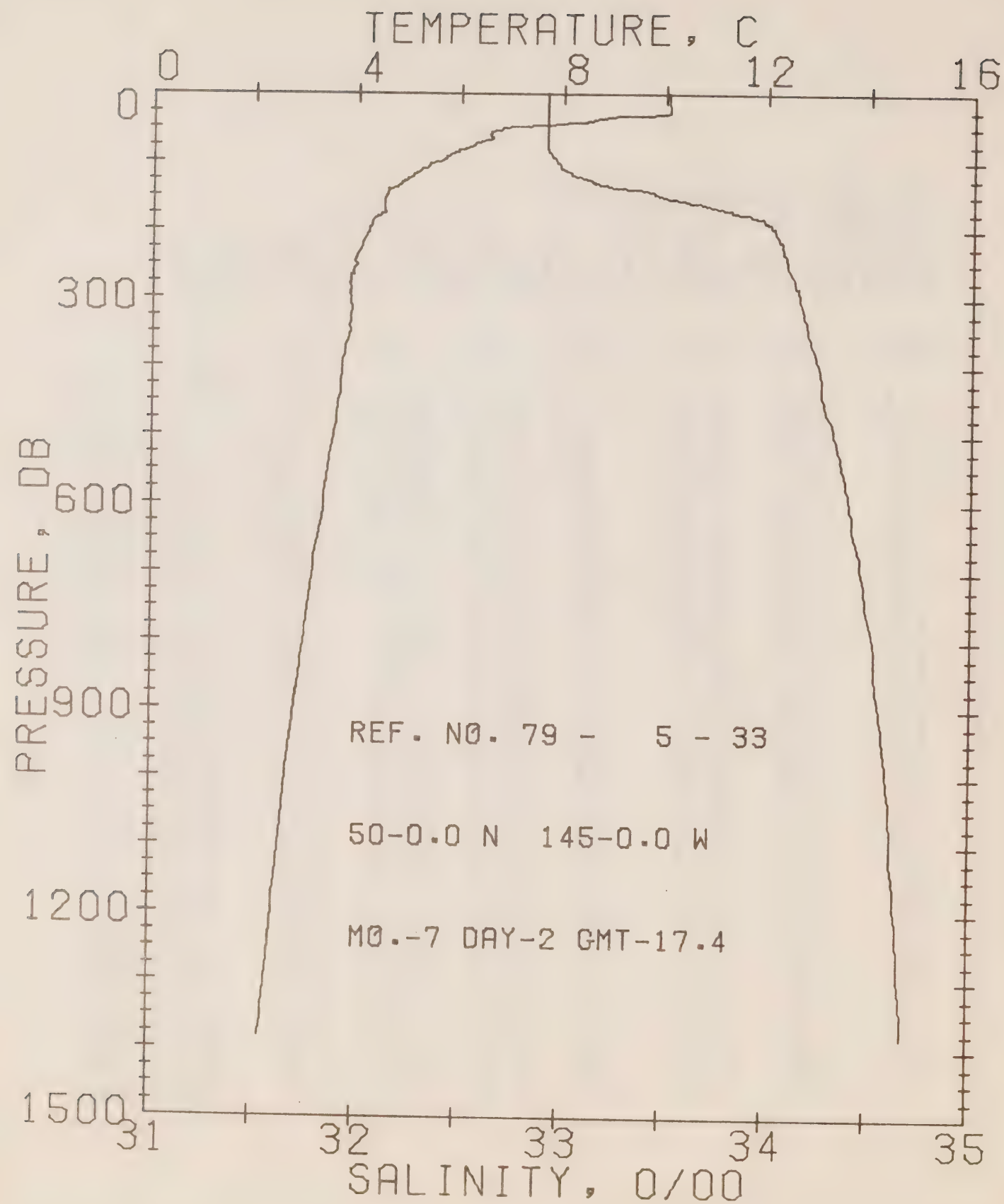
GMT 17.4

STATION P

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.05	32.92	0	25.34	264.0	.00	.00	1488.
10	10.06	32.92	10	25.34	264.3	.26	.01	1488.
20	10.07	32.92	20	25.34	264.7	.53	.05	1488.
30	10.01	32.92	30	25.35	263.9	.79	.12	1488.
40	8.46	32.92	40	25.60	240.5	1.04	.21	1483.
50	6.85	32.92	50	25.83	218.8	1.27	.32	1477.
60	6.54	32.92	60	25.87	215.0	1.49	.44	1475.
70	6.38	32.92	70	25.89	213.2	1.70	.58	1475.
80	6.09	32.92	79	25.92	209.8	1.92	.74	1474.
90	5.78	32.94	89	25.98	204.7	2.12	.92	1473.
100	5.49	32.97	99	26.04	199.3	2.33	1.12	1472.
110	5.27	32.99	109	26.08	195.4	2.52	1.33	1471.
120	5.08	33.04	119	26.14	189.6	2.71	1.55	1471.
130	4.83	33.15	129	26.25	178.8	2.90	1.79	1470.
140	4.57	33.33	139	26.42	162.6	3.07	2.02	1469.
150	4.54	33.47	149	26.54	151.9	3.23	2.25	1470.
160	4.52	33.61	159	26.65	141.3	3.37	2.49	1470.
170	4.51	33.79	169	26.79	127.8	3.51	2.71	1470.
180	4.37	33.95	179	26.94	114.4	3.63	2.93	1470.
190	4.26	34.01	189	26.99	108.9	3.74	3.14	1470.
200	4.21	34.03	199	27.02	106.8	3.85	3.35	1470.
210	4.15	34.05	209	27.04	105.0	3.95	3.57	1470.
220	4.08	34.07	218	27.06	102.8	4.06	3.80	1470.
230	4.02	34.08	228	27.08	101.5	4.16	4.04	1469.
240	3.97	34.09	238	27.09	100.3	4.26	4.28	1469.
250	3.97	34.10	248	27.10	99.7	4.36	4.53	1470.
260	3.90	34.11	258	27.11	98.6	4.46	4.78	1469.
270	3.87	34.13	268	27.13	96.9	4.56	5.05	1470.
280	3.85	34.13	278	27.13	96.5	4.65	5.32	1470.
290	3.85	34.15	288	27.15	95.0	4.75	5.60	1470.
300	3.86	34.16	298	27.16	94.5	4.84	5.88	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 33

DATE 2/ 7/79

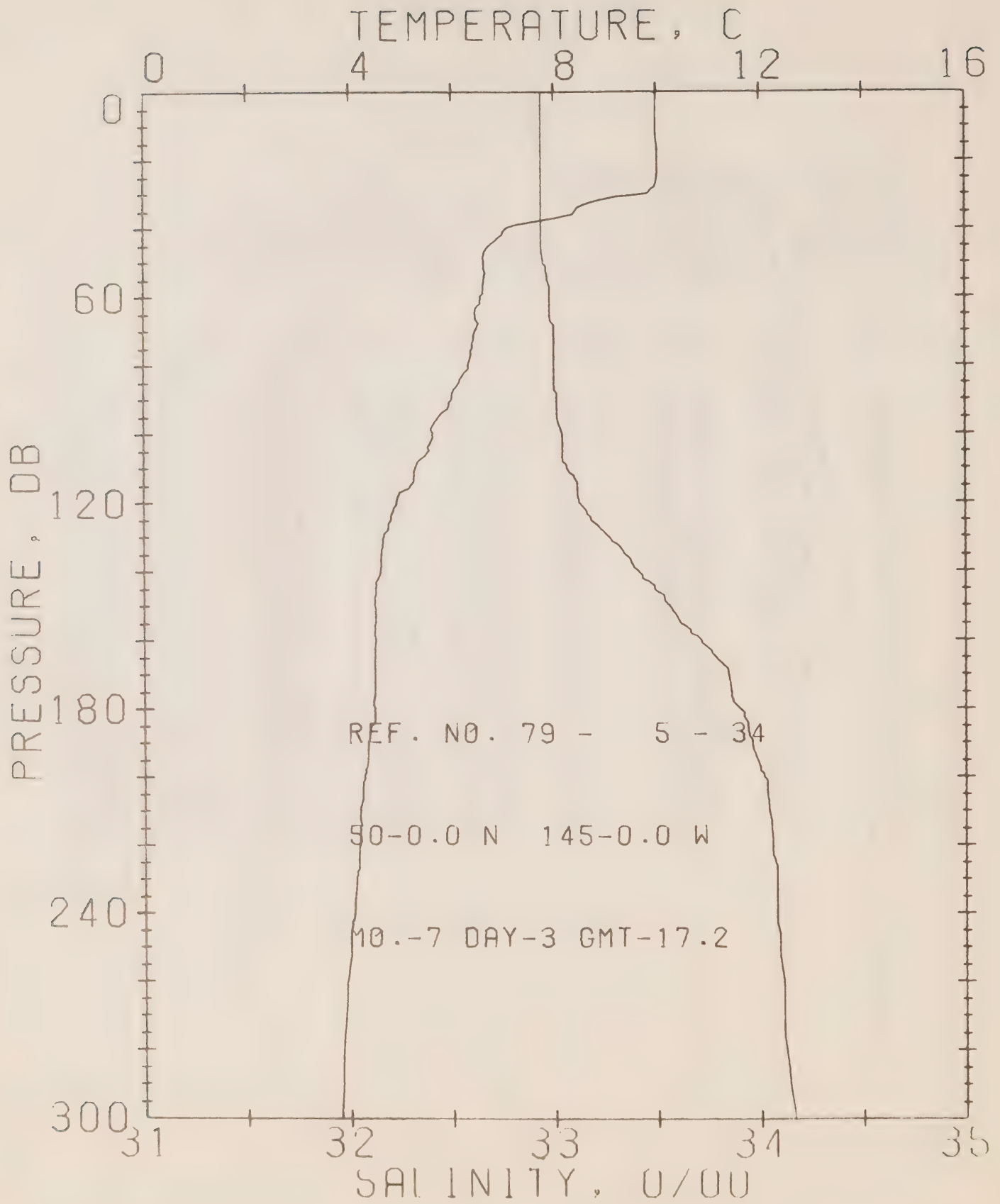
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 282 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.05	32.92	0	25.34	264.0	.00	.00	1488.
10	10.06	32.92	10	25.34	264.3	.26	.01	1488.
20	10.07	32.92	20	25.34	264.7	.53	.05	1488.
30	10.01	32.92	30	25.35	263.9	.79	.12	1488.
50	6.85	32.92	50	25.83	218.8	1.27	.32	1477.
75	6.24	32.92	75	25.90	211.5	1.81	.66	1475.
100	5.49	32.97	99	26.04	199.3	2.33	1.12	1472.
125	4.94	33.11	124	26.20	183.3	2.81	1.67	1470.
150	4.54	33.47	149	26.54	151.9	3.23	2.25	1470.
175	4.51	33.88	174	26.87	121.1	3.57	2.82	1470.
200	4.21	34.03	199	27.02	106.8	3.85	3.35	1470.
225	4.06	34.07	223	27.06	102.5	4.11	3.92	1470.
250	3.97	34.10	248	27.10	99.7	4.36	4.53	1470.
300	3.86	34.16	298	27.16	94.5	4.84	5.88	1470.
400	3.71	34.25	397	27.24	86.9	5.76	9.13	1471.
500	3.55	34.33	496	27.32	80.2	6.60	12.98	1472.
600	3.36	34.41	595	27.40	73.2	7.36	17.25	1473.
800	2.98	34.52	793	27.53	61.9	8.71	26.84	1475.
1000	2.65	34.59	990	27.61	54.5	9.88	37.54	1477.
1200	2.41	34.64	1188	27.67	49.3	10.92	49.14	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 34

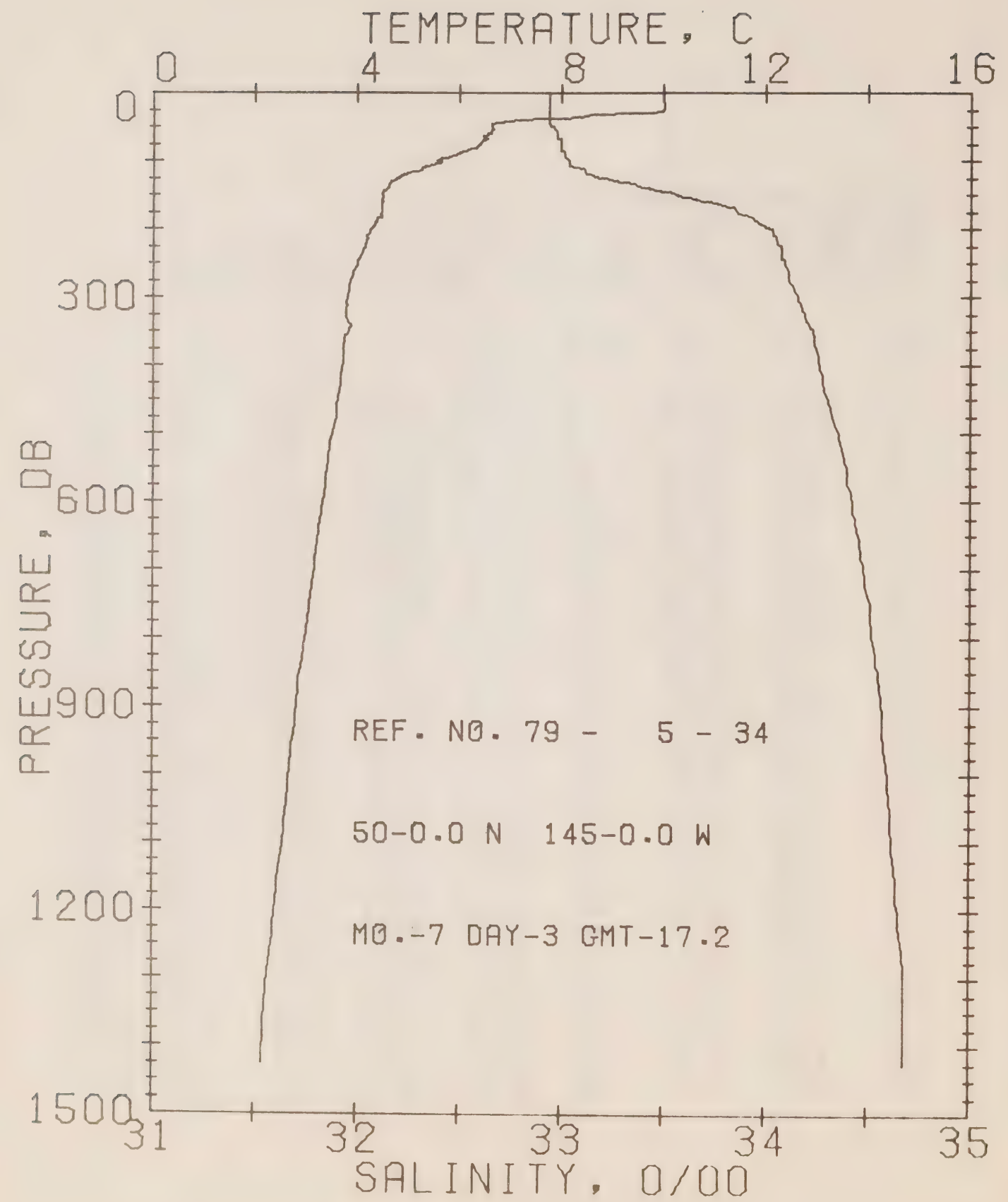
DATE 3/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.2 STATION P

RESULTS OF STP CAST 182 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.01	32.94	0	25.37	261.8	.00	.00	1488.
10	10.01	32.94	10	25.37	262.0	.26	.01	1488.
20	10.02	32.94	20	25.36	262.4	.52	.05	1488.
30	9.81	32.94	30	25.40	259.3	.79	.12	1488.
40	7.07	32.94	40	25.81	220.0	1.02	.20	1477.
50	6.63	32.95	50	25.88	213.8	1.24	.30	1476.
60	6.57	32.98	60	25.91	210.9	1.45	.42	1476.
70	6.46	33.00	70	25.94	208.2	1.66	.56	1475.
80	6.33	33.00	79	25.96	206.7	1.87	.72	1475.
90	5.99	33.01	89	26.01	202.0	2.07	.90	1474.
100	5.63	33.04	99	26.07	195.6	2.27	1.09	1473.
110	5.28	33.06	109	26.13	190.3	2.47	1.30	1471.
120	4.91	33.12	119	26.22	181.8	2.65	1.51	1470.
130	4.66	33.27	129	26.37	168.0	2.83	1.74	1469.
140	4.60	33.41	139	26.48	156.9	2.99	1.96	1469.
150	4.48	33.56	149	26.62	144.5	3.14	2.18	1469.
160	4.50	33.71	159	26.73	133.6	3.28	2.40	1470.
170	4.48	33.85	169	26.84	123.0	3.41	2.62	1470.
180	4.47	33.90	179	26.89	119.2	3.53	2.84	1470.
190	4.35	33.96	189	26.95	113.6	3.65	3.05	1470.
200	4.28	34.02	199	27.00	108.4	3.76	3.28	1470.
210	4.20	34.04	208	27.03	106.0	3.86	3.50	1470.
220	4.19	34.06	218	27.04	104.7	3.97	3.73	1470.
230	4.10	34.08	228	27.07	102.3	4.07	3.97	1470.
240	4.06	34.08	238	27.07	102.0	4.17	4.21	1470.
250	4.00	34.09	248	27.09	100.7	4.28	4.47	1470.
260	3.94	34.11	258	27.11	98.8	4.38	4.73	1470.
270	3.89	34.11	268	27.11	98.3	4.47	4.99	1470.
280	3.86	34.12	278	27.12	97.4	4.57	5.27	1470.
290	3.83	34.14	288	27.14	95.6	4.67	5.55	1470.
300	3.81	34.16	298	27.16	94.0	4.76	5.83	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 34

DATE 3/ 7/79

POSITION 50- .0N, 145- .0W

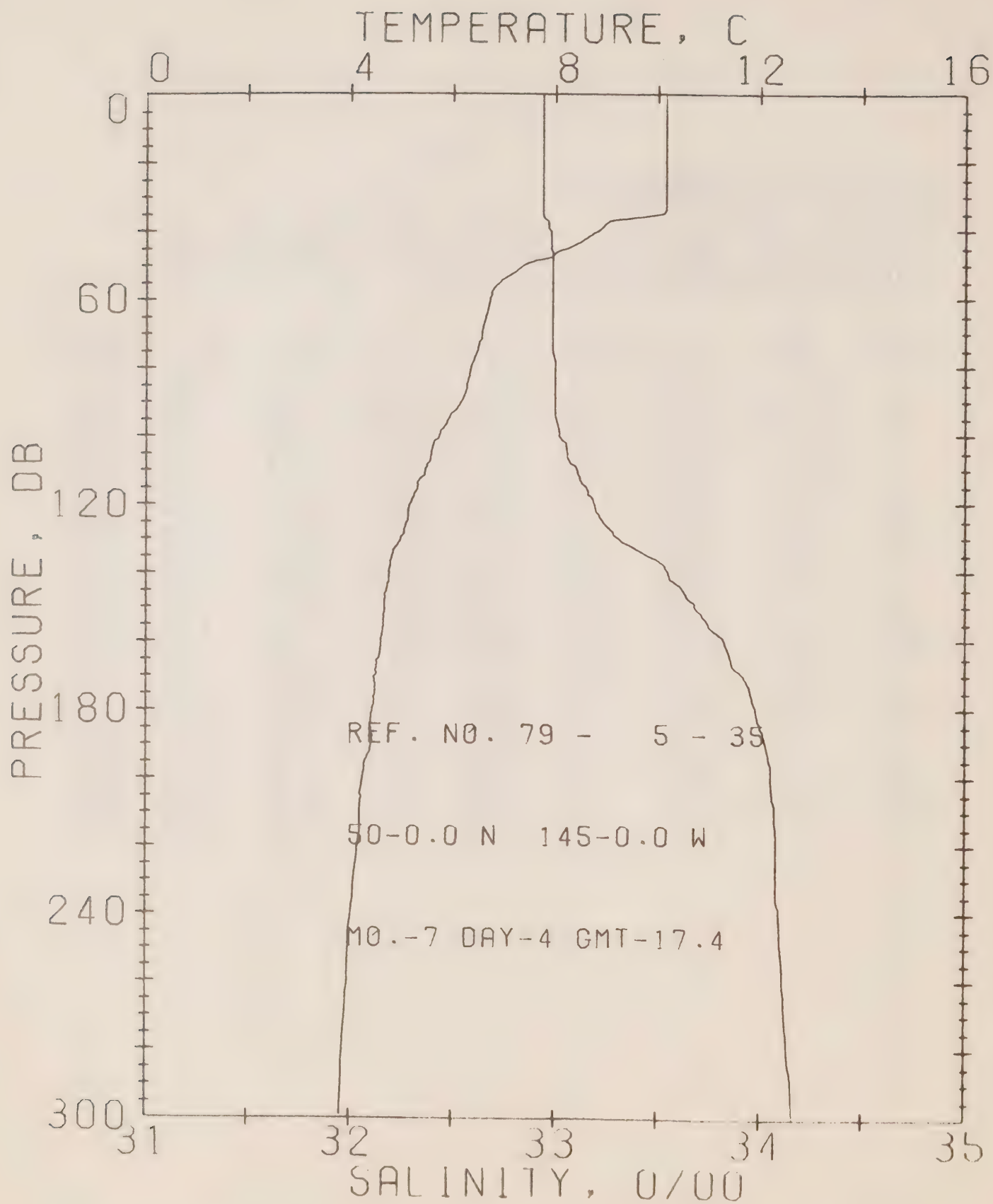
GMT 17.2

STATION P

RESULTS OF STP CAST 292 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.01	32.94	0	25.37	261.8	.00	.00	1488.
10	10.01	32.94	10	25.37	262.0	.26	.01	1488.
20	10.02	32.94	20	25.36	262.4	.52	.05	1488.
30	9.81	32.94	30	25.40	259.3	.79	.12	1488.
50	6.63	32.95	50	25.88	213.8	1.24	.30	1476.
75	6.39	33.00	75	25.95	207.4	1.77	.64	1475.
100	5.63	33.04	99	26.07	195.6	2.27	1.09	1473.
125	4.80	33.18	124	26.28	176.2	2.74	1.63	1470.
150	4.48	33.56	149	26.62	144.5	3.14	2.18	1469.
175	4.47	33.86	174	26.85	122.2	3.47	2.73	1470.
200	4.28	34.02	199	27.00	108.4	3.76	3.28	1470.
225	4.17	34.07	223	27.05	103.5	4.02	3.85	1470.
250	4.00	34.09	248	27.09	100.7	4.28	4.47	1470.
300	3.81	34.16	298	27.16	94.0	4.76	5.83	1470.
400	3.72	34.26	397	27.25	86.1	5.66	9.03	1471.
500	3.52	34.36	496	27.35	77.6	6.48	12.79	1472.
600	3.34	34.43	595	27.42	71.2	7.23	16.96	1473.
800	2.99	34.52	793	27.53	62.2	8.56	26.41	1475.
1000	2.68	34.60	990	27.61	54.6	9.72	37.03	1477.
1200	2.40	34.65	1188	27.68	48.9	10.76	48.66	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 35

DATE 4/ 7/79

POSITION 50- .0N, 145- .0W

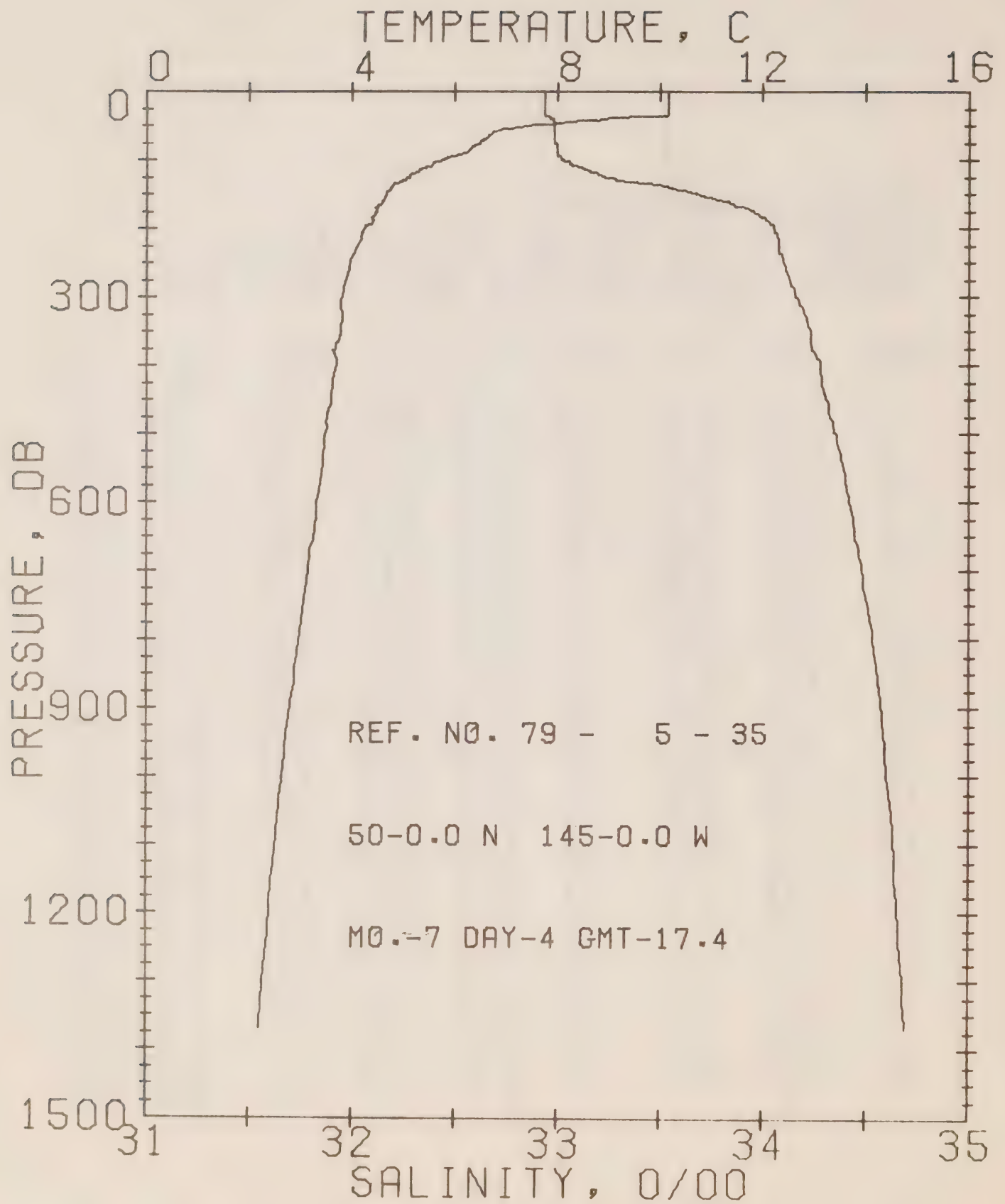
GMT 17.4

STATION P

RESULTS OF STP CAST 150 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.15	32.94	0	25.34	264.1	.00	.00	1488.
10	10.15	32.94	10	25.34	264.3	.26	.01	1488.
20	10.16	32.94	20	25.34	264.7	.53	.05	1489.
30	10.17	32.94	30	25.34	265.0	.79	.12	1489.
40	8.86	32.98	40	25.58	241.9	1.05	.21	1484.
50	7.40	32.99	50	25.81	220.8	1.28	.32	1479.
60	6.72	32.99	60	25.90	212.1	1.50	.44	1476.
70	6.57	32.99	70	25.92	210.3	1.71	.58	1476.
80	6.35	33.00	79	25.95	207.0	1.92	.74	1475.
90	6.18	33.00	89	25.98	205.0	2.12	.92	1475.
100	5.74	33.02	99	26.05	198.4	2.33	1.11	1473.
110	5.47	33.11	109	26.14	189.0	2.52	1.32	1472.
120	5.17	33.19	119	26.25	179.4	2.70	1.54	1471.
130	4.98	33.31	129	26.36	168.4	2.88	1.76	1471.
140	4.76	33.55	139	26.58	148.2	3.04	1.98	1470.
150	4.66	33.68	149	26.69	137.5	3.18	2.19	1470.
160	4.59	33.83	159	26.82	125.6	3.31	2.39	1470.
170	4.50	33.92	169	26.90	118.0	3.43	2.60	1470.
180	4.44	33.98	179	26.95	112.9	3.55	2.81	1470.
190	4.40	34.03	189	26.99	109.0	3.66	3.02	1470.
200	4.24	34.05	199	27.03	105.8	3.77	3.23	1470.
210	4.20	34.07	208	27.05	103.9	3.87	3.45	1470.
220	4.15	34.08	218	27.06	102.8	3.97	3.67	1470.
230	4.08	34.08	228	27.07	102.2	4.08	3.91	1470.
240	4.01	34.09	238	27.09	100.7	4.18	4.15	1470.
250	3.97	34.10	248	27.10	99.5	4.28	4.40	1470.
260	3.94	34.11	258	27.11	98.7	4.38	4.66	1470.
270	3.90	34.12	268	27.12	97.4	4.48	4.92	1470.
280	3.86	34.13	278	27.13	96.4	4.57	5.19	1470.
290	3.84	34.15	288	27.15	94.8	4.67	5.47	1470.
300	3.81	34.16	298	27.16	93.8	4.76	5.76	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 35

DATE 4/ 7/79

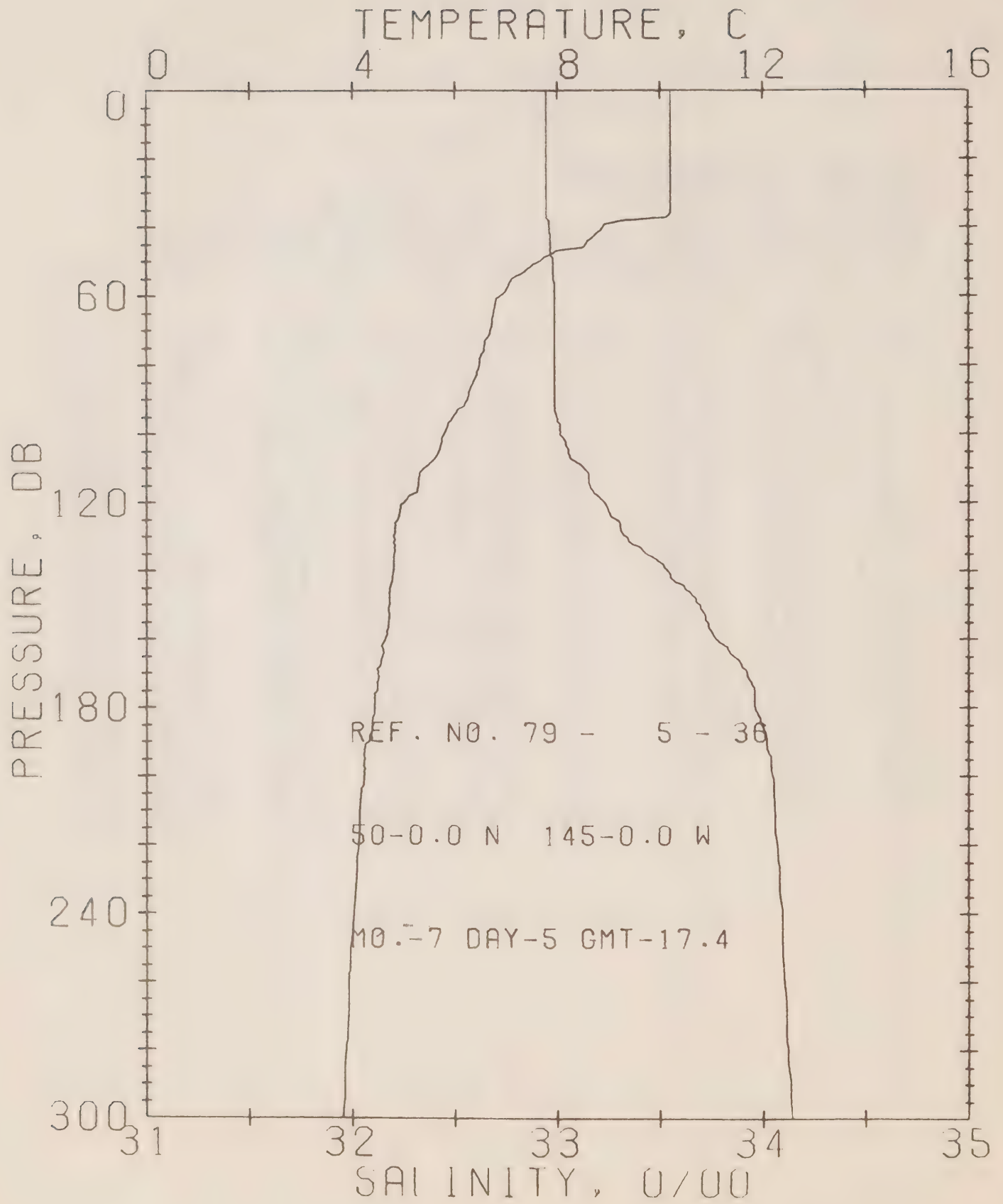
POSITION 50- .0N, 145- .0W GMT 17.4

STATION P

RESULTS OF STP CAST 249 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

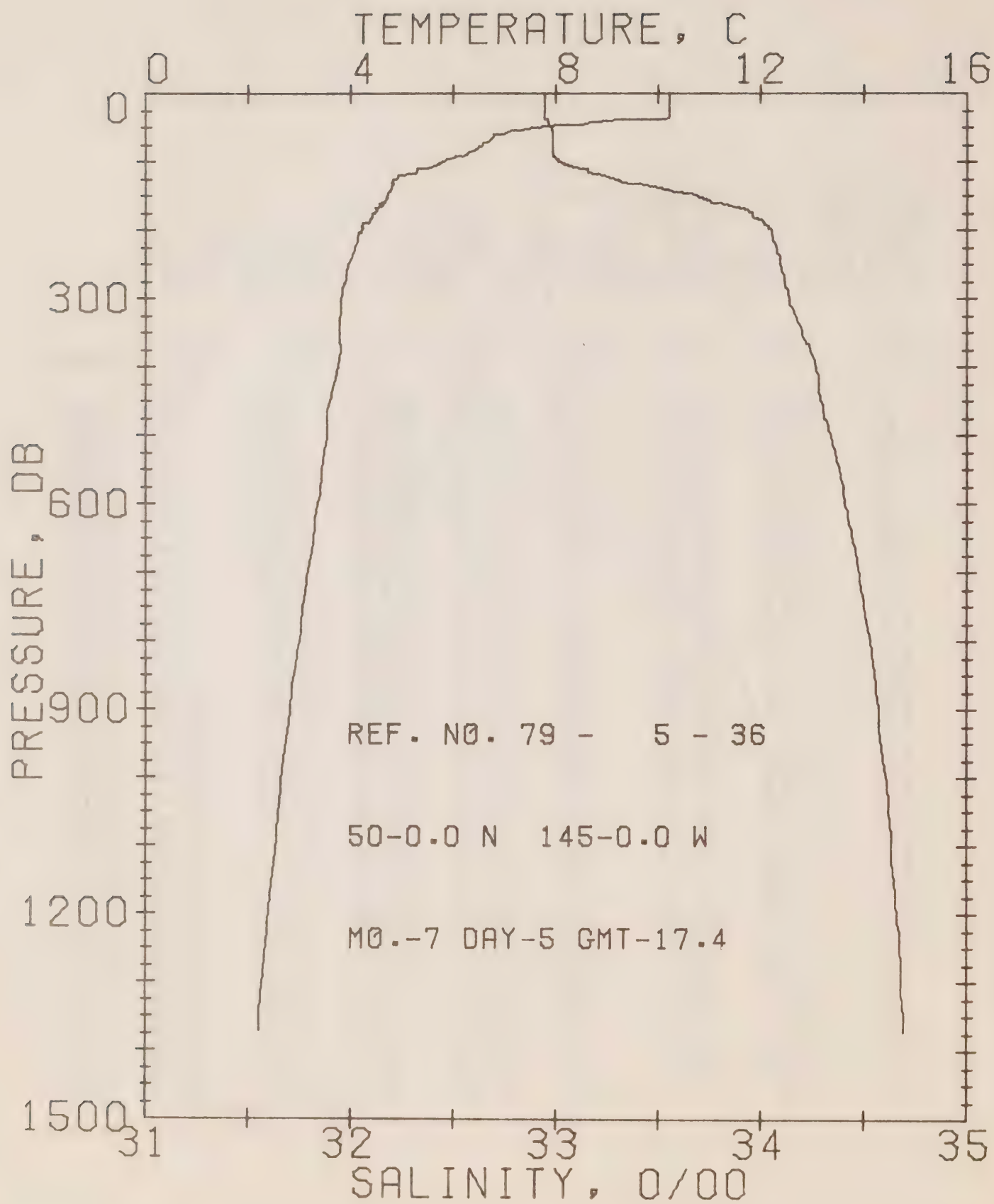
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.15	32.94	0	25.34	264.1	.00	.00	1488.
10	10.15	32.94	10	25.34	264.3	.26	.01	1488.
20	10.16	32.94	20	25.34	264.7	.53	.05	1489.
30	10.17	32.94	30	25.34	265.0	.79	.12	1489.
50	7.40	32.99	50	25.81	220.8	1.28	.32	1479.
75	6.48	32.99	75	25.93	209.3	1.81	.66	1476.
100	5.74	33.02	99	26.05	198.4	2.33	1.11	1473.
125	5.12	33.23	124	26.28	175.9	2.79	1.65	1471.
150	4.66	33.68	149	26.69	137.5	3.18	2.19	1470.
175	4.47	33.96	174	26.93	115.0	3.49	2.70	1470.
200	4.24	34.05	199	27.03	105.8	3.77	3.23	1470.
225	4.11	34.08	223	27.07	102.4	4.03	3.79	1470.
250	3.97	34.10	248	27.10	99.5	4.28	4.40	1470.
300	3.81	34.16	298	27.16	93.8	4.76	5.76	1470.
400	3.71	34.28	397	27.27	84.7	5.65	8.93	1471.
500	3.48	34.35	496	27.35	77.7	6.47	12.66	1472.
600	3.31	34.42	595	27.42	71.8	7.22	16.85	1473.
800	2.96	34.53	793	27.54	61.3	8.54	26.26	1475.
1000	2.65	34.60	990	27.62	54.0	9.68	36.72	1477.
1200	2.39	34.65	1188	27.68	48.4	10.70	48.09	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 36 DATE 5/ 7/79
 POSITION 50- .0N, 145- .0W GMT 17.4 STATION P
 RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE
 GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.20	32.95	0	25.34	264.1	.00	.00	1488.
10	10.21	32.95	10	25.34	264.6	.26	.01	1489.
20	10.20	32.95	20	25.34	264.6	.53	.05	1489.
30	10.20	32.95	30	25.34	264.7	.79	.12	1489.
40	8.87	32.96	40	25.56	243.6	1.05	.21	1484.
50	7.65	32.98	50	25.76	224.9	1.29	.32	1480.
60	6.87	32.99	60	25.88	214.0	1.51	.44	1477.
70	6.69	32.99	70	25.90	211.8	1.72	.59	1476.
80	6.48	32.99	79	25.93	209.3	1.93	.75	1476.
90	6.23	32.99	89	25.96	206.4	2.14	.93	1475.
100	5.78	33.01	99	26.03	199.6	2.34	1.12	1473.
110	5.38	33.13	109	26.17	186.2	2.54	1.33	1472.
120	5.00	33.23	119	26.30	174.5	2.72	1.54	1471.
130	4.81	33.34	129	26.41	164.3	2.89	1.76	1470.
140	4.79	33.54	139	26.57	149.2	3.04	1.97	1470.
150	4.71	33.69	149	26.69	137.2	3.19	2.19	1471.
160	4.64	33.78	159	26.77	130.2	3.32	2.40	1470.
170	4.50	33.92	169	26.90	117.6	3.44	2.61	1470.
180	4.43	33.96	179	26.94	113.9	3.56	2.81	1470.
190	4.31	34.02	189	27.00	108.7	3.67	3.02	1470.
200	4.22	34.05	199	27.03	105.9	3.78	3.23	1470.
210	4.14	34.06	208	27.05	104.2	3.88	3.45	1470.
220	4.11	34.07	218	27.06	103.3	3.99	3.68	1470.
230	4.07	34.08	228	27.07	102.0	4.09	3.91	1470.
240	4.02	34.09	238	27.08	100.8	4.19	4.16	1470.
250	3.97	34.09	248	27.09	100.4	4.29	4.41	1470.
260	3.93	34.10	258	27.10	99.1	4.39	4.67	1470.
270	3.91	34.11	268	27.11	98.4	4.49	4.93	1470.
280	3.87	34.12	278	27.12	97.5	4.59	5.21	1470.
290	3.84	34.13	288	27.13	96.4	4.68	5.49	1470.
300	3.82	34.14	298	27.14	95.6	4.78	5.78	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 36

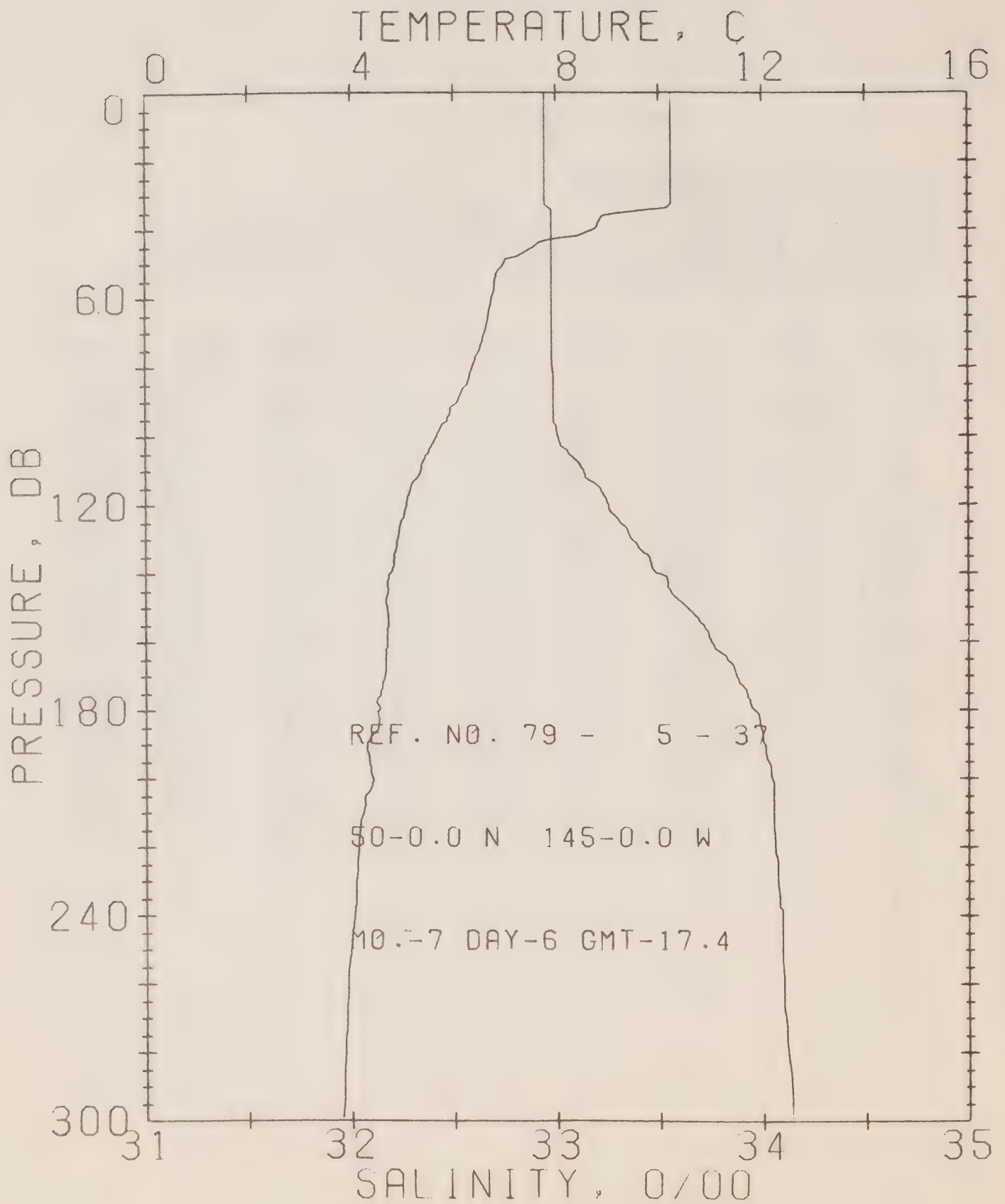
DATE 5/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 270 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DLPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.20	32.95	0	25.34	264.1	.00	.00	1488.
10	10.21	32.95	10	25.34	264.6	.26	.01	1489.
20	10.20	32.95	20	25.34	264.6	.53	.05	1489.
30	10.20	32.95	30	25.34	264.7	.79	.12	1489.
50	7.65	32.98	50	25.76	224.9	1.29	.32	1480.
75	6.57	32.99	75	25.92	210.4	1.83	.66	1476.
100	5.78	33.01	99	26.03	199.6	2.34	1.12	1473.
125	4.87	33.30	124	26.37	167.9	2.80	1.65	1470.
150	4.71	33.69	149	26.69	137.2	3.19	2.19	1471.
175	4.49	33.96	174	26.93	114.9	3.50	2.71	1470.
200	4.22	34.05	199	27.03	105.9	3.78	3.23	1470.
225	4.09	34.07	223	27.06	102.6	4.04	3.80	1470.
250	3.97	34.09	248	27.09	100.4	4.29	4.41	1470.
300	3.82	34.14	298	27.14	95.6	4.78	5.78	1470.
400	3.76	34.27	397	27.25	86.3	5.69	9.03	1471.
500	3.54	34.34	496	27.33	79.3	6.52	12.83	1472.
600	3.35	34.41	595	27.40	72.9	7.28	17.08	1473.
800	3.00	34.53	793	27.53	61.6	8.62	26.61	1475.
1000	2.66	34.61	990	27.62	53.7	9.78	37.16	1477.
1200	2.39	34.66	1188	27.69	48.1	10.80	48.58	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 37

DATE 6/ 7/79

POSITION 50- .0N, 145- .0W

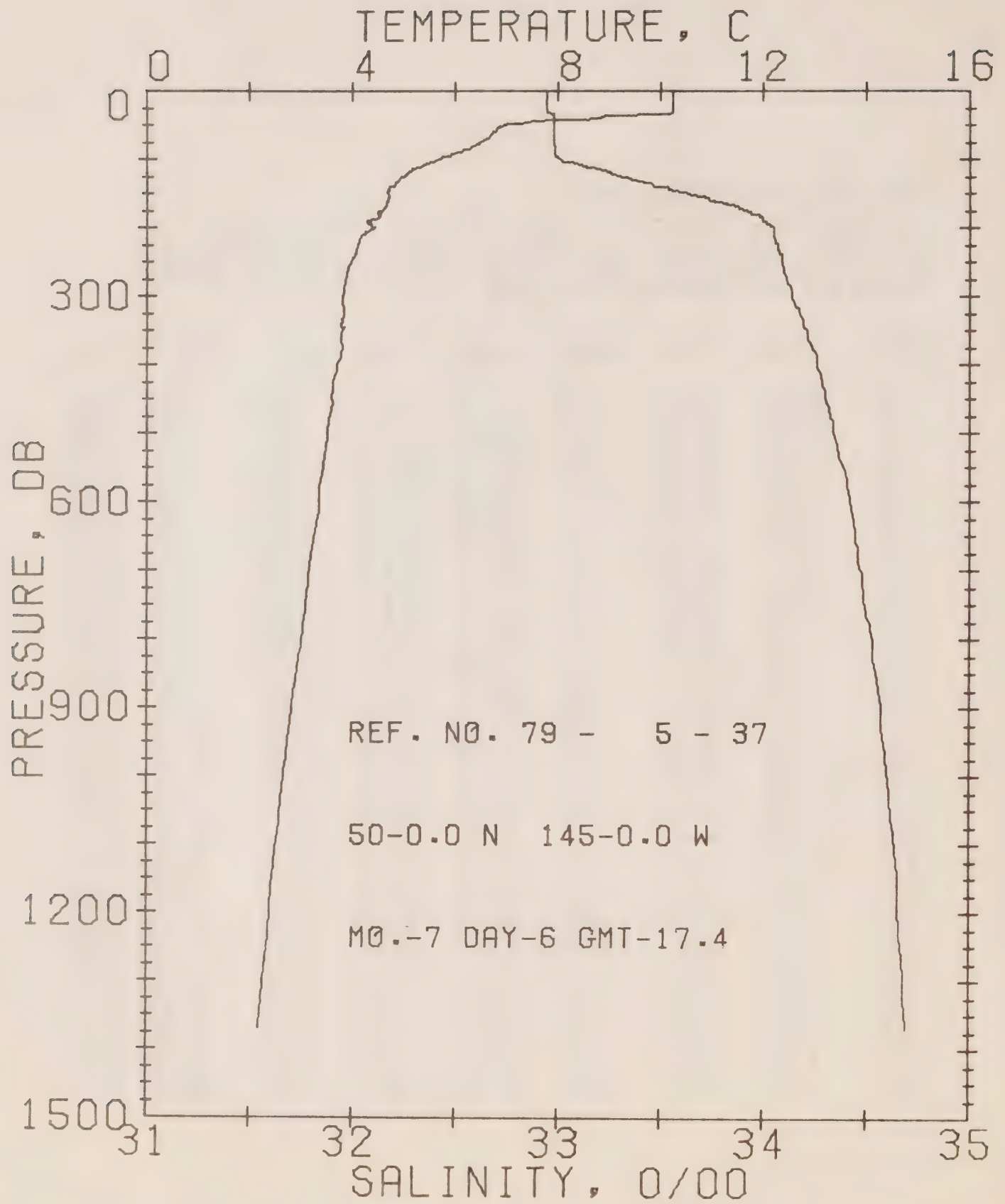
GMT 17.4

STATION P

RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.25	32.95	0	25.33	265.0	.00	.00	1489.
10	10.25	32.95	10	25.33	265.1	.27	.01	1489.
20	10.25	32.95	20	25.33	265.3	.53	.05	1489.
30	10.25	32.95	30	25.33	265.5	.80	.12	1489.
40	8.78	32.98	40	25.59	240.8	1.05	.21	1484.
50	7.00	32.98	50	25.85	216.2	1.27	.32	1477.
60	6.76	32.98	60	25.88	213.3	1.49	.44	1476.
70	6.61	32.98	70	25.90	211.6	1.70	.58	1476.
80	6.38	32.98	79	25.94	208.6	1.91	.74	1475.
90	6.08	32.99	89	25.98	204.5	2.12	.92	1474.
100	5.67	33.01	99	26.04	198.6	2.32	1.11	1473.
110	5.35	33.13	109	26.18	185.8	2.51	1.32	1472.
120	5.08	33.25	119	26.30	173.9	2.69	1.53	1471.
130	4.90	33.36	129	26.41	163.8	2.86	1.74	1471.
140	4.77	33.48	139	26.52	153.5	3.02	1.96	1470.
150	4.69	33.63	149	26.65	141.5	3.16	2.18	1470.
160	4.69	33.75	159	26.74	132.6	3.30	2.39	1471.
170	4.66	33.87	169	26.85	123.0	3.43	2.60	1471.
180	4.55	33.97	179	26.93	114.9	3.55	2.82	1471.
190	4.30	34.01	189	26.99	109.3	3.66	3.03	1470.
200	4.39	34.05	199	27.01	107.8	3.77	3.24	1470.
210	4.22	34.05	208	27.03	105.7	3.87	3.47	1470.
220	4.13	34.06	218	27.05	104.0	3.98	3.70	1470.
230	4.09	34.07	228	27.06	103.0	4.08	3.93	1470.
240	4.04	34.09	238	27.08	101.0	4.18	4.18	1470.
250	3.99	34.09	248	27.09	100.6	4.29	4.43	1470.
260	3.92	34.10	258	27.10	99.3	4.39	4.69	1470.
270	3.89	34.11	268	27.11	98.6	4.48	4.96	1470.
280	3.86	34.12	278	27.12	97.5	4.58	5.23	1470.
290	3.84	34.13	288	27.14	96.1	4.68	5.51	1470.
300	3.81	34.14	298	27.14	95.5	4.77	5.80	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 37

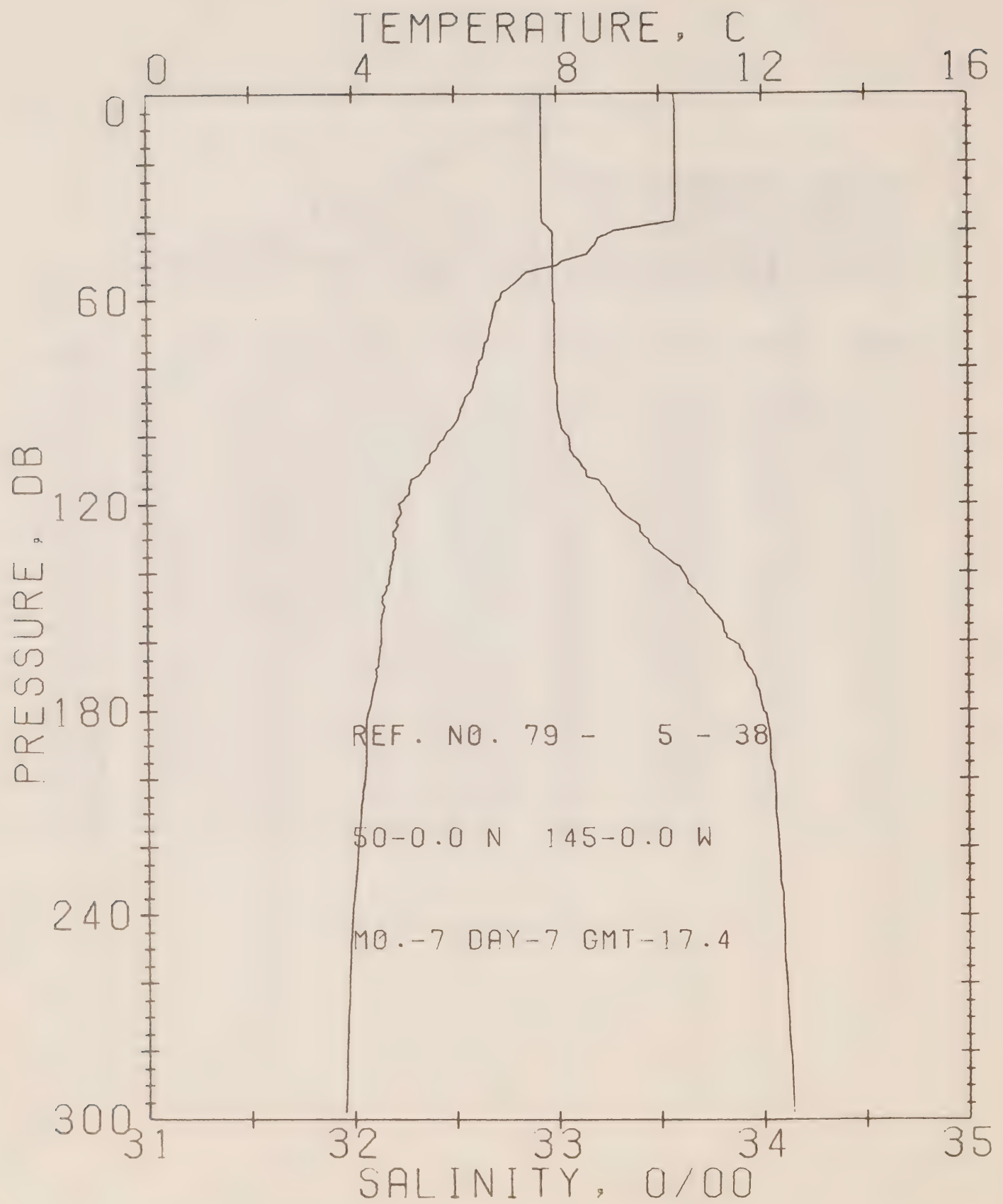
DATE 6/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 275 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.25	32.95	0	25.33	265.0	.00	.00	1489.
10	10.25	32.95	10	25.33	265.1	.27	.01	1489.
20	10.25	32.95	20	25.33	265.3	.53	.05	1489.
30	10.25	32.95	30	25.33	265.5	.80	.12	1489.
50	7.00	32.98	50	25.85	216.2	1.27	.32	1477.
75	6.50	32.98	75	25.92	210.2	1.81	.65	1476.
100	5.67	33.01	99	26.04	198.6	2.32	1.11	1473.
125	4.96	33.31	124	26.36	168.2	2.78	1.63	1471.
150	4.69	33.63	149	26.65	141.5	3.16	2.18	1470.
175	4.57	33.93	174	26.90	118.0	3.49	2.71	1471.
200	4.39	34.05	199	27.01	107.8	3.77	3.24	1470.
225	4.11	34.07	223	27.06	103.2	4.03	3.81	1470.
250	3.99	34.09	248	27.09	100.6	4.29	4.43	1470.
300	3.81	34.14	298	27.14	95.5	4.77	5.80	1470.
400	3.71	34.26	397	27.25	86.3	5.68	9.04	1471.
500	3.53	34.34	496	27.33	78.9	6.51	12.80	1472.
600	3.35	34.42	595	27.41	72.0	7.26	17.00	1473.
800	3.02	34.53	793	27.53	62.0	8.60	26.54	1475.
1000	2.66	34.60	990	27.62	54.0	9.76	37.15	1477.
1200	2.39	34.65	1188	27.68	48.5	10.78	48.54	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 38

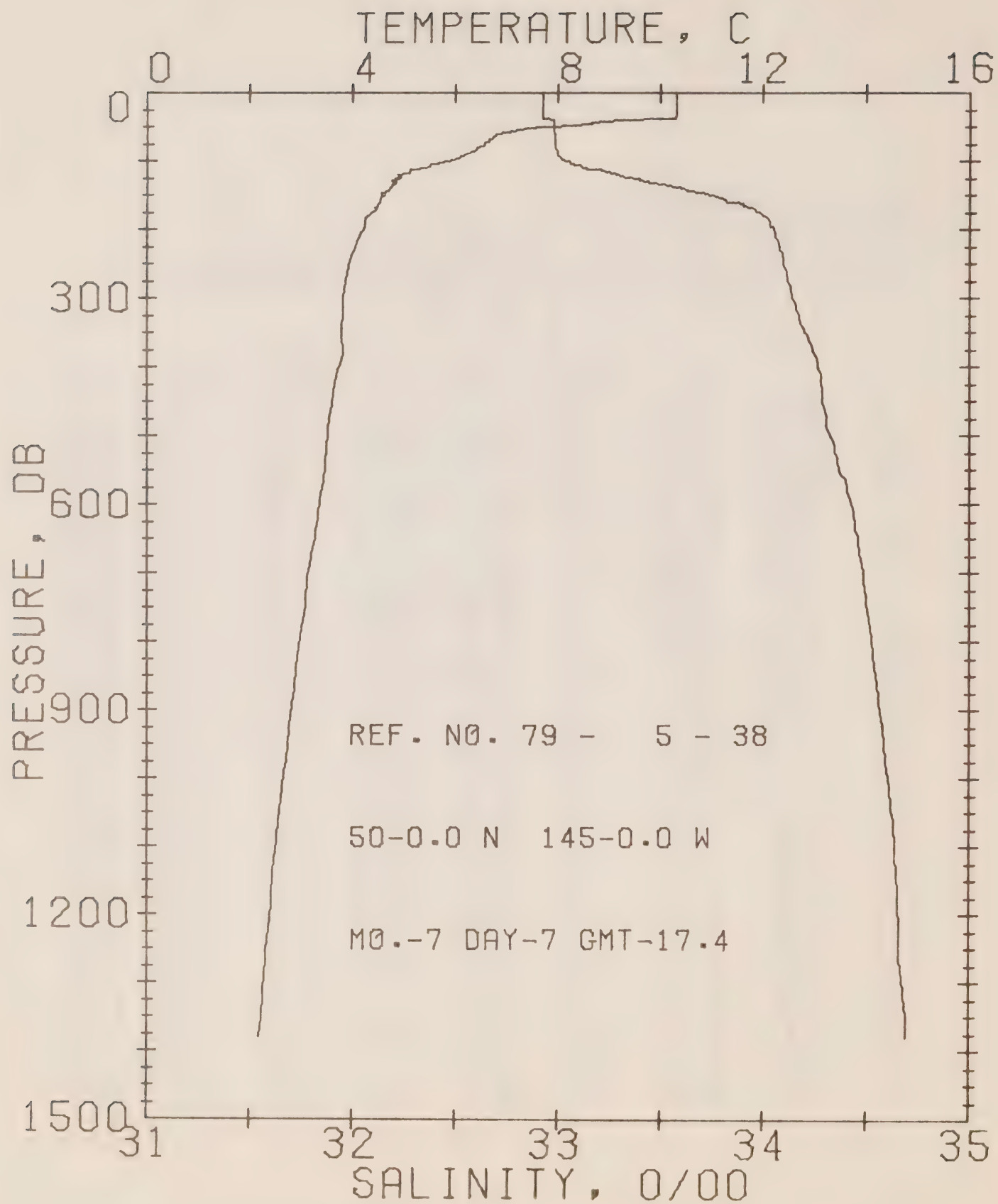
DATE 7/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 146 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.30	32.93	0	25.31	267.2	.00	.00	1489.
10	10.31	32.93	10	25.31	267.6	.27	.01	1489.
20	10.32	32.93	20	25.31	267.9	.54	.05	1489.
30	10.32	32.93	30	25.31	268.2	.80	.12	1489.
40	9.08	32.98	40	25.55	245.2	1.07	.22	1485.
50	8.01	32.98	50	25.71	229.9	1.31	.33	1481.
60	6.88	32.98	60	25.87	214.9	1.53	.45	1477.
70	6.68	32.99	70	25.90	211.7	1.74	.59	1476.
80	6.43	32.99	79	25.94	208.7	1.95	.75	1475.
90	6.18	33.00	89	25.98	205.0	2.16	.93	1475.
100	5.79	33.05	99	26.06	196.7	2.36	1.13	1473.
110	5.35	33.14	109	26.19	185.1	2.55	1.33	1472.
120	4.89	33.26	119	26.35	169.6	2.73	1.54	1470.
130	4.82	33.44	129	26.48	157.0	2.89	1.75	1470.
140	4.71	33.61	139	26.63	143.1	3.04	1.95	1470.
150	4.61	33.74	149	26.74	132.4	3.18	2.16	1470.
160	4.54	33.85	159	26.84	123.5	3.31	2.36	1470.
170	4.45	33.96	169	26.94	114.4	3.42	2.56	1470.
180	4.30	34.00	179	26.98	110.0	3.54	2.76	1470.
190	4.23	34.03	189	27.01	107.1	3.64	2.96	1470.
200	4.21	34.05	199	27.03	105.5	3.75	3.17	1470.
210	4.12	34.06	208	27.05	103.9	3.85	3.39	1470.
220	4.07	34.07	218	27.06	102.5	3.96	3.62	1470.
230	4.02	34.08	228	27.08	101.5	4.06	3.85	1469.
240	3.97	34.09	238	27.09	100.0	4.16	4.09	1469.
250	3.93	34.10	248	27.10	99.3	4.26	4.34	1469.
260	3.90	34.11	258	27.11	98.4	4.36	4.60	1469.
270	3.87	34.12	268	27.12	97.5	4.46	4.86	1470.
280	3.85	34.13	278	27.13	96.7	4.55	5.13	1470.
290	3.83	34.13	288	27.14	96.1	4.65	5.41	1470.
300	3.82	34.14	298	27.15	95.3	4.75	5.70	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 38

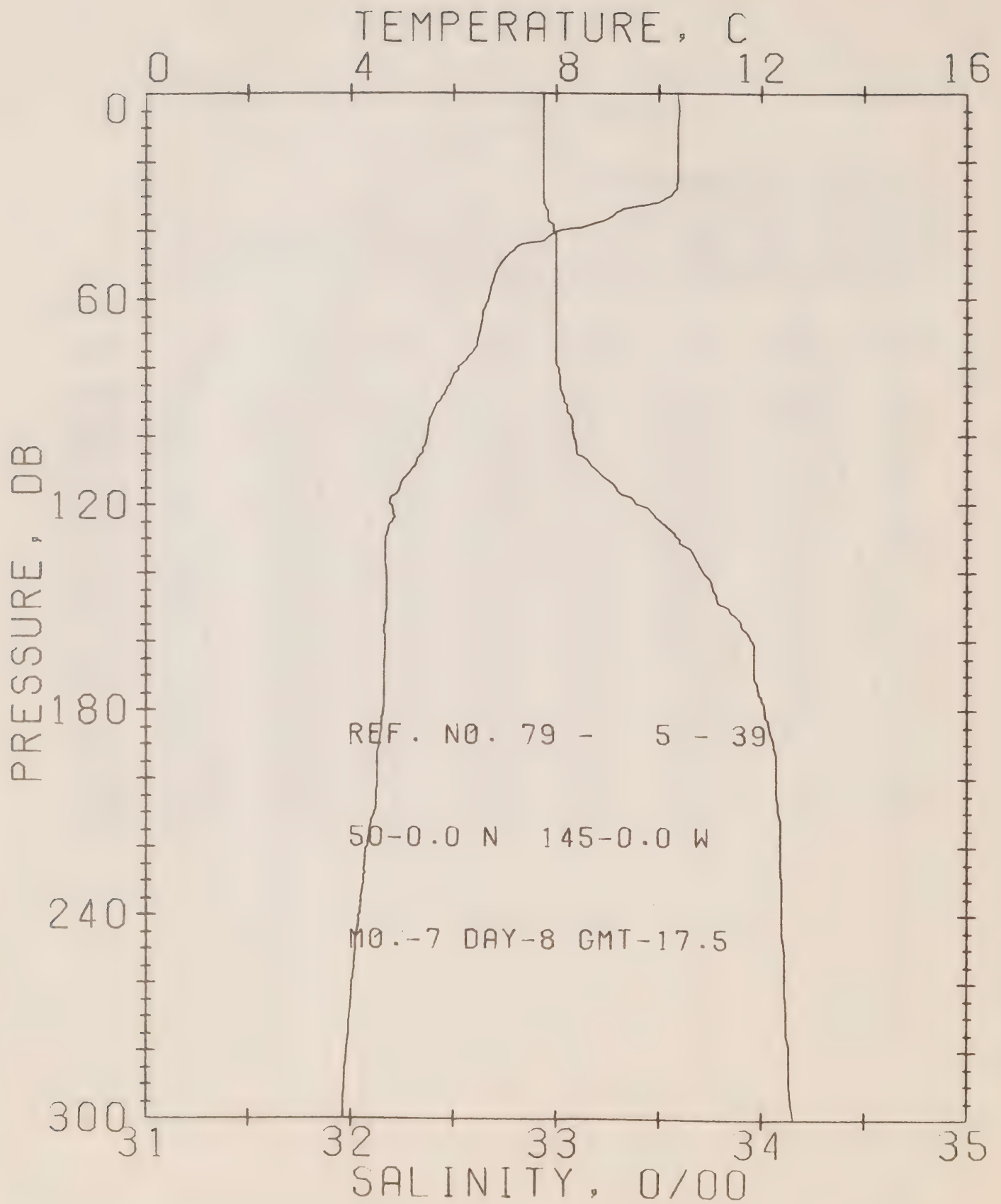
DATE 7/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

RESULTS OF STP CAST 238 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.30	32.93	0	25.31	267.2	.00	.00	1489.
10	10.31	32.93	10	25.31	267.6	.27	.01	1489.
20	10.32	32.93	20	25.31	267.9	.54	.05	1489.
30	10.32	32.93	30	25.31	268.2	.80	.12	1489.
50	8.01	32.98	50	25.71	229.9	1.31	.33	1481.
75	6.56	32.99	75	25.92	210.3	1.84	.67	1476.
100	5.79	33.05	99	26.06	196.7	2.36	1.13	1473.
125	4.84	33.38	124	26.43	161.6	2.81	1.64	1470.
150	4.61	33.74	149	26.74	132.4	3.18	2.16	1470.
175	4.35	33.98	174	26.96	111.7	3.48	2.66	1470.
200	4.21	34.05	199	27.03	105.5	3.75	3.17	1470.
225	4.06	34.08	223	27.07	101.9	4.01	3.73	1470.
250	3.93	34.10	248	27.10	99.3	4.26	4.34	1469.
300	3.82	34.14	298	27.15	95.3	4.75	5.70	1470.
400	3.74	34.27	397	27.26	85.8	5.66	8.94	1471.
500	3.52	34.33	496	27.32	80.0	6.49	12.74	1472.
600	3.36	34.43	595	27.42	71.6	7.24	16.99	1473.
800	2.97	34.53	793	27.53	61.7	8.57	26.41	1475.
1000	2.66	34.60	990	27.62	53.8	9.73	36.99	1477.
1200	2.40	34.65	1188	27.68	48.4	10.74	48.32	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 39

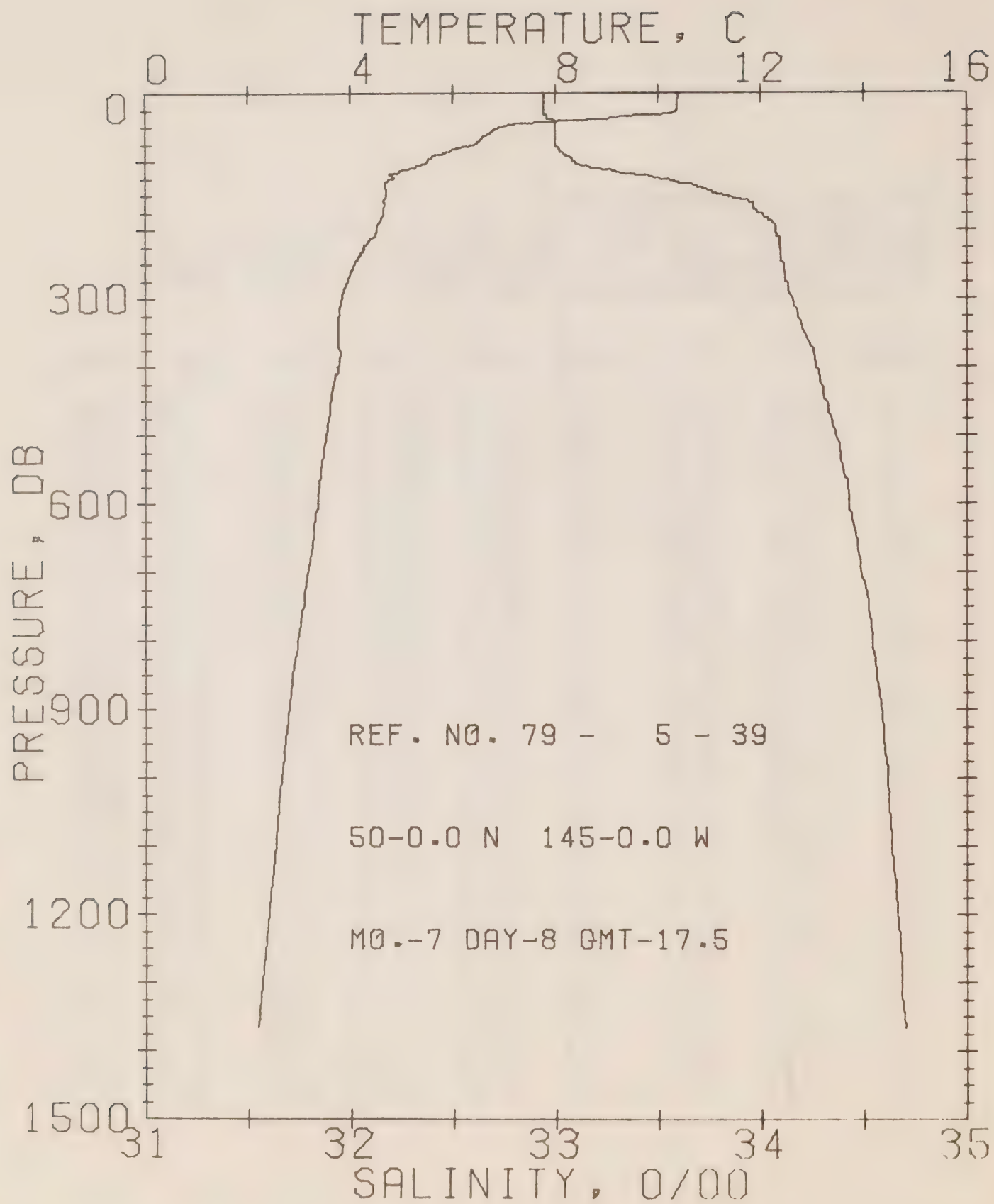
DATE 8/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.38	32.94	0	25.30	267.8	.00	.00	1489.
10	10.38	32.94	10	25.30	268.0	.27	.01	1489.
20	10.38	32.94	20	25.30	268.2	.54	.05	1489.
30	10.25	32.94	30	25.33	266.3	.80	.12	1489.
40	8.07	32.99	40	25.71	229.8	1.05	.21	1481.
50	6.91	33.00	50	25.88	213.6	1.27	.31	1477.
60	6.69	33.00	60	25.91	210.9	1.49	.43	1476.
70	6.49	33.00	70	25.94	208.6	1.69	.57	1476.
80	6.09	33.01	79	25.99	203.1	1.90	.73	1474.
90	5.73	33.04	89	26.06	196.7	2.10	.90	1473.
100	5.47	33.09	99	26.13	190.4	2.29	1.09	1472.
110	5.17	33.20	109	26.25	178.6	2.48	1.29	1471.
120	4.75	33.39	119	26.45	159.9	2.65	1.49	1470.
130	4.68	33.60	129	26.63	143.5	2.80	1.68	1470.
140	4.69	33.72	139	26.72	134.7	2.94	1.87	1470.
150	4.70	33.84	149	26.81	125.9	3.07	2.06	1471.
160	4.66	33.96	159	26.91	116.6	3.19	2.25	1471.
170	4.64	33.97	169	26.92	115.8	3.31	2.45	1471.
180	4.62	34.01	179	26.96	112.3	3.42	2.65	1471.
190	4.55	34.06	189	27.00	108.2	3.53	2.86	1471.
200	4.51	34.07	199	27.02	107.1	3.64	3.07	1471.
210	4.44	34.08	208	27.03	105.5	3.75	3.30	1471.
220	4.31	34.09	218	27.05	103.7	3.85	3.52	1471.
230	4.24	34.10	228	27.07	102.3	3.95	3.76	1470.
240	4.15	34.10	238	27.08	101.5	4.06	4.00	1470.
250	4.08	34.11	248	27.09	100.2	4.16	4.26	1470.
260	4.01	34.11	258	27.10	99.4	4.26	4.52	1470.
270	3.96	34.12	268	27.11	98.2	4.35	4.78	1470.
280	3.90	34.13	278	27.13	97.0	4.45	5.06	1470.
290	3.86	34.13	288	27.13	96.6	4.55	5.34	1470.
300	3.83	34.15	298	27.15	94.9	4.65	5.63	1470.



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REFERENCE NO. 79- 5- 39

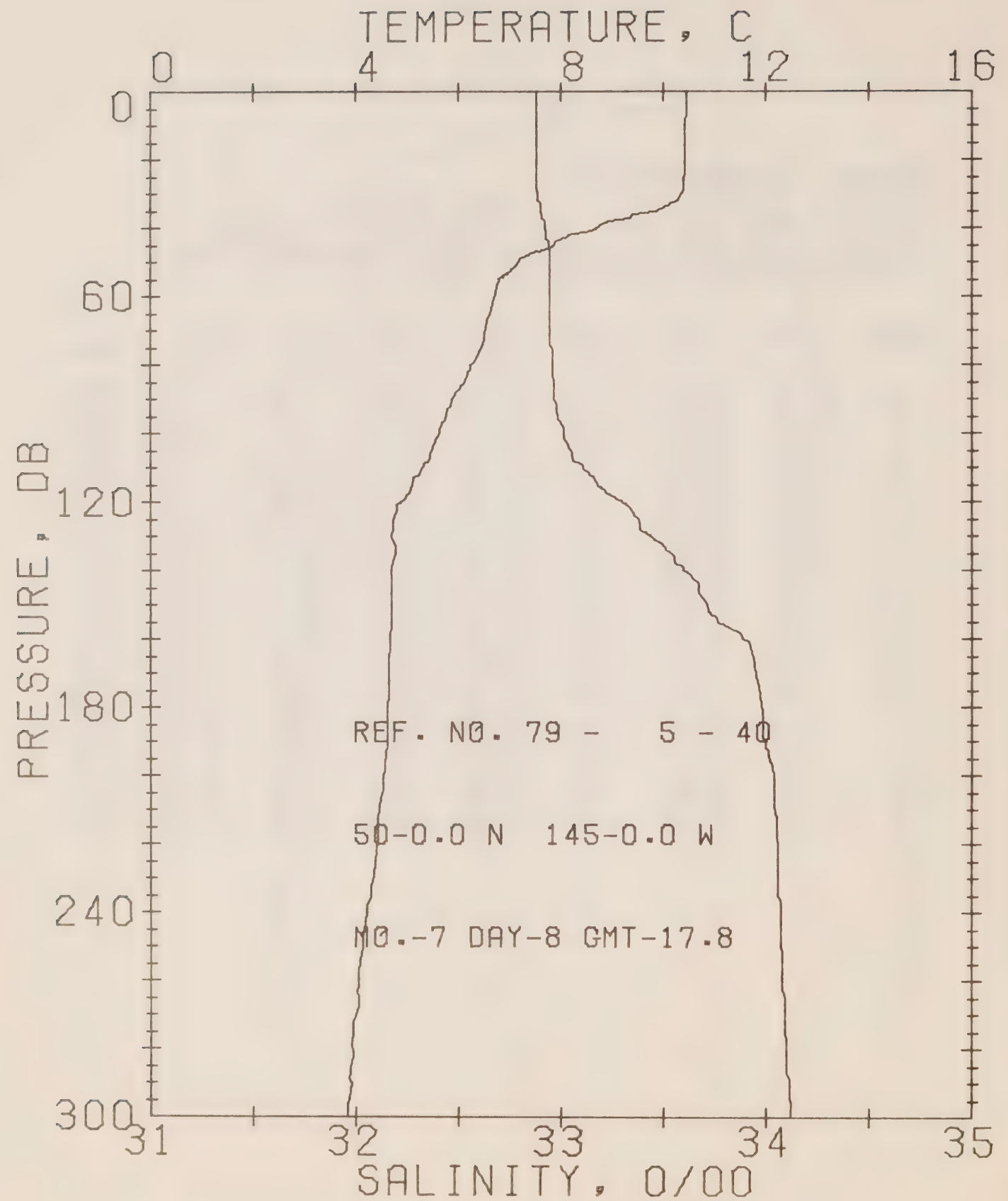
DATE 8/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 280 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.38	32.94	0	25.30	267.8	.00	.00	1489.
10	10.38	32.94	10	25.30	268.0	.27	.01	1489.
20	10.38	32.94	20	25.30	268.2	.54	.05	1489.
30	10.25	32.94	30	25.33	266.3	.80	.12	1489.
50	6.91	33.00	50	25.88	213.6	1.27	.31	1477.
75	6.40	33.00	75	25.95	207.5	1.80	.65	1475.
100	5.47	33.09	99	26.13	190.4	2.29	1.09	1472.
125	4.80	33.51	124	26.54	151.5	2.73	1.58	1470.
150	4.70	33.84	149	26.81	125.9	3.07	2.06	1471.
175	4.63	33.99	174	26.94	114.2	3.37	2.55	1471.
200	4.51	34.07	199	27.02	107.1	3.64	3.07	1471.
225	4.27	34.09	223	27.06	103.3	3.90	3.64	1470.
250	4.08	34.11	248	27.09	100.2	4.16	4.26	1470.
300	3.83	34.15	298	27.15	94.9	4.65	5.63	1470.
400	3.75	34.27	397	27.25	85.9	5.55	8.84	1471.
500	3.51	34.36	496	27.35	77.2	6.36	12.57	1472.
600	3.36	34.43	595	27.42	71.5	7.10	16.71	1473.
800	2.96	34.54	793	27.54	60.6	8.42	26.05	1475.
1000	2.64	34.61	990	27.63	53.1	9.55	36.40	1477.
1200	2.39	34.66	1188	27.69	47.8	10.56	47.75	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 40

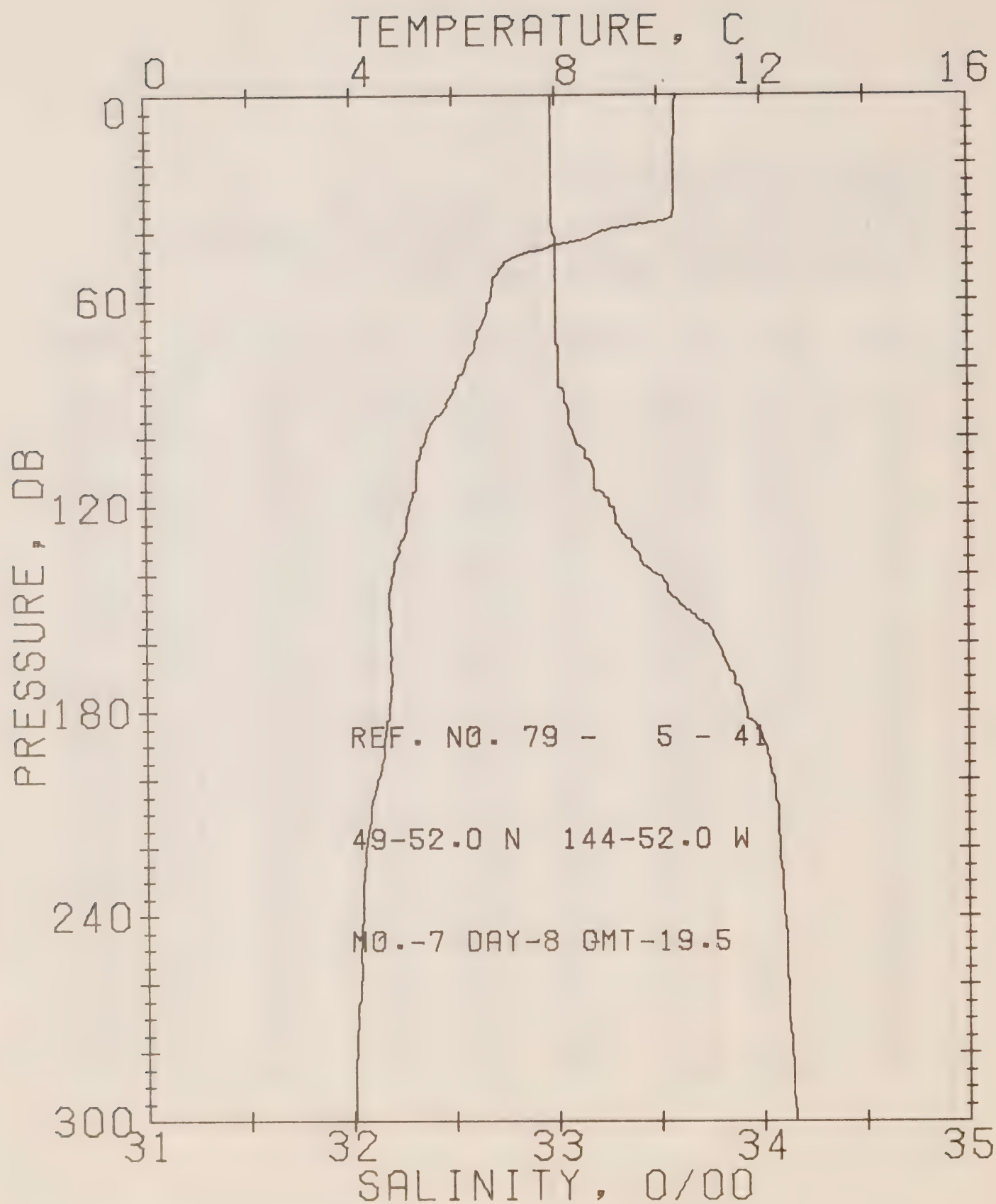
DATE 8/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.8 STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

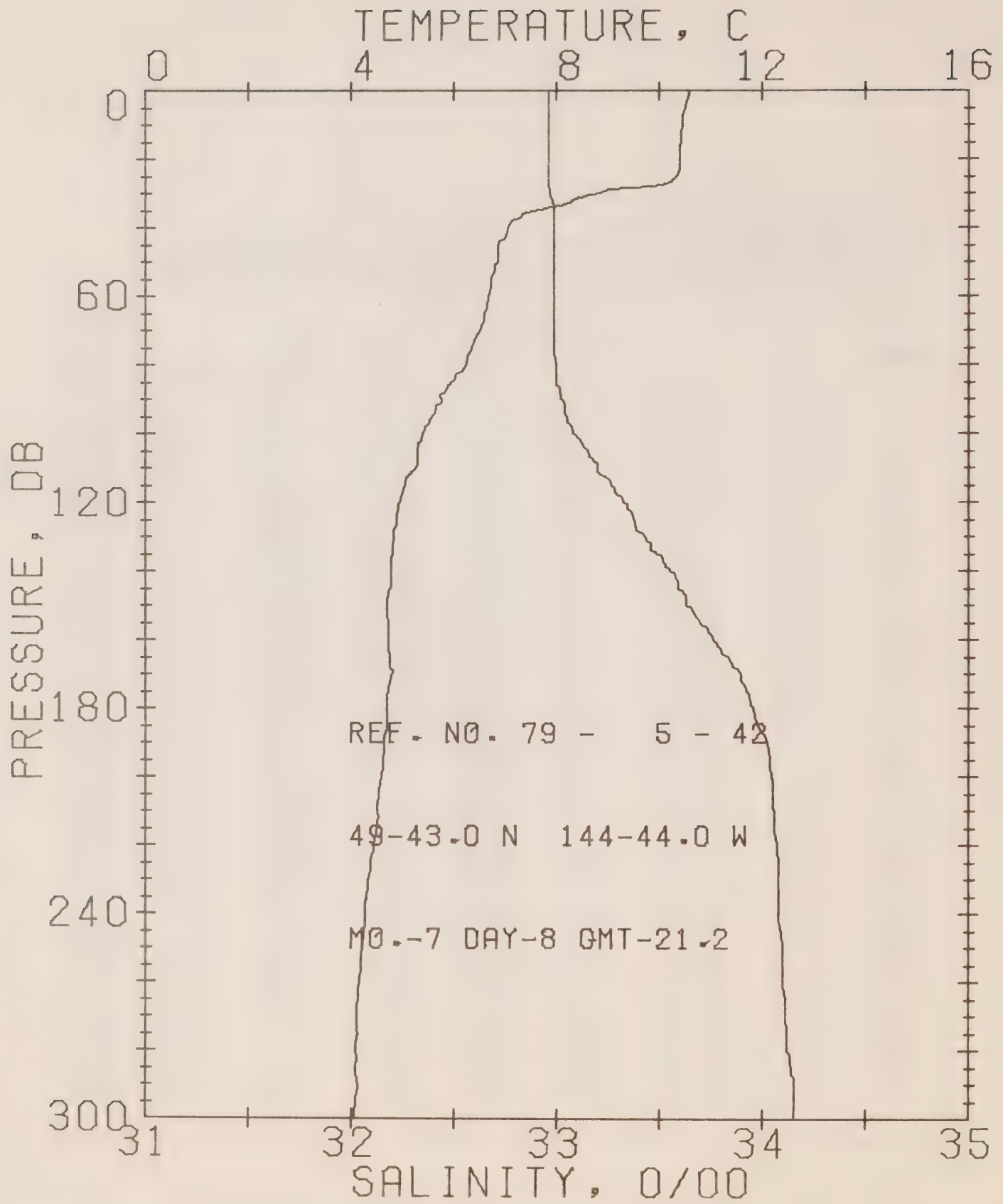
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.44	32.88	0	25.25	273.2	.00	.00	1489.
10	10.43	32.88	10	25.25	273.2	.27	.01	1489.
20	10.42	32.88	20	25.25	273.3	.55	.06	1490.
30	10.35	32.89	30	25.27	271.6	.82	.13	1489.
40	8.69	32.92	40	25.56	243.9	1.08	.22	1483.
50	7.16	32.95	50	25.81	220.6	1.31	.32	1478.
60	6.70	32.95	60	25.87	214.8	1.53	.44	1476.
70	6.52	32.95	70	25.89	212.7	1.74	.59	1476.
80	6.25	32.96	79	25.93	208.7	1.95	.75	1475.
90	5.87	32.97	89	25.99	203.6	2.16	.93	1473.
100	5.62	33.01	99	26.05	197.8	2.36	1.12	1473.
110	5.30	33.11	109	26.17	187.0	2.55	1.33	1472.
120	4.89	33.30	119	26.36	168.1	2.73	1.54	1470.
130	4.70	33.44	129	26.50	155.7	2.89	1.74	1470.
140	4.69	33.60	139	26.62	143.7	3.04	1.95	1470.
150	4.69	33.71	149	26.71	135.5	3.18	2.15	1470.
160	4.67	33.89	159	26.86	121.9	3.31	2.36	1471.
170	4.65	33.95	169	26.91	117.0	3.43	2.56	1471.
180	4.62	33.98	179	26.94	114.5	3.54	2.76	1471.
190	4.61	33.99	189	26.95	113.7	3.66	2.98	1471.
200	4.55	34.04	199	26.99	110.0	3.77	3.20	1471.
210	4.45	34.04	208	27.00	108.7	3.88	3.43	1471.
220	4.41	34.06	218	27.02	107.3	3.99	3.67	1471.
230	4.33	34.06	228	27.03	106.3	4.09	3.91	1471.
240	4.21	34.07	238	27.05	104.3	4.20	4.16	1470.
250	4.12	34.07	248	27.06	103.5	4.30	4.42	1470.
260	4.06	34.08	258	27.07	102.2	4.41	4.69	1470.
270	3.99	34.09	268	27.09	100.8	4.51	4.96	1470.
280	3.92	34.10	278	27.10	99.5	4.61	5.24	1470.
290	3.91	34.11	288	27.11	98.6	4.71	5.53	1470.
300	3.84	34.12	298	27.13	97.3	4.80	5.83	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 41 DATE 8/ 7/79
 POSITION 49-52.0N, 144-52.0W GMT 19.5 STATION E3
 RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.37	32.98	0	25.34	264.7	.00	.00	1489.
10	10.34	32.98	10	25.34	264.4	.26	.01	1489.
20	10.31	32.98	20	25.35	264.1	.53	.05	1489.
30	10.31	32.98	30	25.35	264.3	.79	.12	1489.
40	8.86	32.99	40	25.59	241.2	1.05	.21	1484.
50	6.95	33.00	50	25.88	214.1	1.28	.32	1477.
60	6.71	33.00	60	25.91	211.2	1.49	.44	1476.
70	6.48	33.00	70	25.94	208.5	1.70	.57	1475.
80	6.22	33.01	79	25.98	204.6	1.91	.73	1475.
90	5.84	33.04	89	26.05	198.0	2.11	.91	1473.
100	5.44	33.09	99	26.13	190.1	2.30	1.09	1472.
110	5.25	33.18	109	26.23	180.9	2.49	1.29	1471.
120	5.13	33.26	119	26.31	173.7	2.67	1.50	1471.
130	4.96	33.36	129	26.40	164.5	2.84	1.72	1471.
140	4.80	33.49	139	26.52	153.1	3.00	1.94	1470.
150	4.74	33.62	149	26.64	142.4	3.14	2.16	1471.
160	4.74	33.78	159	26.76	130.9	3.28	2.37	1471.
170	4.77	33.86	169	26.82	125.0	3.41	2.59	1471.
180	4.73	33.92	179	26.88	120.1	3.53	2.80	1471.
190	4.61	34.01	189	26.96	112.6	3.65	3.02	1471.
200	4.49	34.05	199	27.00	108.4	3.76	3.24	1471.
210	4.35	34.07	208	27.03	105.5	3.86	3.47	1471.
220	4.26	34.08	218	27.05	103.9	3.97	3.70	1470.
230	4.20	34.09	228	27.06	102.7	4.07	3.93	1470.
240	4.18	34.10	238	27.08	101.5	4.17	4.18	1470.
250	4.15	34.11	248	27.09	100.8	4.27	4.43	1470.
260	4.13	34.12	258	27.10	99.9	4.37	4.69	1470.
270	4.08	34.12	268	27.10	99.5	4.47	4.96	1470.
280	4.05	34.13	278	27.11	98.3	4.57	5.24	1470.
290	4.03	34.14	288	27.12	97.6	4.67	5.52	1471.
300	4.03	34.15	298	27.13	97.0	4.77	5.81	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 42

DATE 8/ 7/79

POSITION 49-43.0N, 144-44.0W

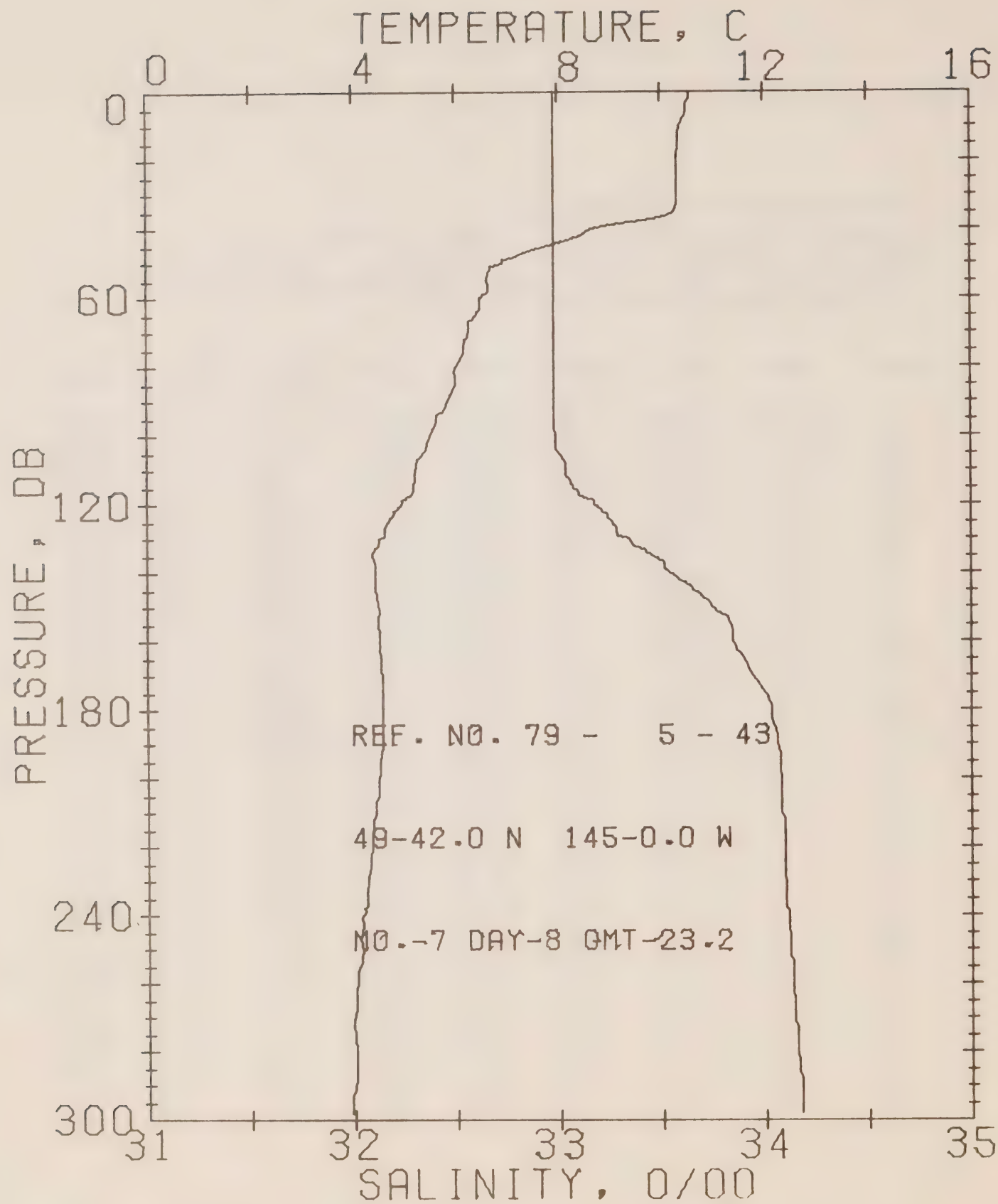
GMT 21.2

STATION E4

RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.56	32.96	0	25.29	269.3	.00	.00	1490.
10	10.45	32.96	10	25.31	267.7	.27	.01	1490.
20	10.40	32.96	20	25.32	267.0	.54	.05	1490.
30	8.83	32.97	30	25.58	242.1	.80	.12	1484.
40	7.05	32.99	40	25.85	216.0	1.02	.20	1477.
50	6.85	32.99	50	25.88	213.6	1.24	.30	1477.
60	6.67	32.99	60	25.90	211.4	1.45	.42	1476.
70	6.50	32.99	70	25.93	209.4	1.66	.56	1476.
80	6.24	33.00	79	25.97	205.6	1.87	.72	1475.
90	5.76	33.02	89	26.04	198.5	2.07	.89	1473.
100	5.39	33.08	99	26.13	189.9	2.26	1.08	1472.
110	5.25	33.20	109	26.24	179.5	2.45	1.28	1471.
120	4.93	33.33	119	26.38	166.3	2.62	1.48	1470.
130	4.82	33.43	129	26.48	157.7	2.78	1.69	1470.
140	4.77	33.55	139	26.58	148.3	2.94	1.90	1470.
150	4.70	33.63	149	26.65	141.6	3.08	2.11	1470.
160	4.72	33.76	159	26.75	132.0	3.22	2.32	1471.
170	4.79	33.89	169	26.85	122.9	3.34	2.54	1471.
180	4.70	33.96	179	26.91	117.2	3.46	2.75	1471.
190	4.65	34.02	189	26.96	112.0	3.58	2.97	1471.
200	4.58	34.05	199	26.99	109.7	3.69	3.19	1471.
210	4.52	34.06	208	27.01	108.1	3.80	3.42	1471.
220	4.44	34.07	218	27.02	106.6	3.91	3.65	1471.
230	4.33	34.08	228	27.04	104.8	4.01	3.90	1471.
240	4.27	34.08	238	27.05	104.2	4.12	4.15	1471.
250	4.21	34.10	248	27.07	102.2	4.22	4.40	1471.
260	4.16	34.10	258	27.08	101.7	4.32	4.67	1471.
270	4.11	34.11	268	27.09	100.5	4.42	4.94	1471.
280	4.07	34.12	278	27.10	99.5	4.52	5.22	1471.
290	4.12	34.15	288	27.12	97.8	4.62	5.51	1471.
300	4.04	34.15	298	27.13	97.1	4.72	5.80	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 43

DATE 8/ 7/79

POSITION 49-42.0N, 145- .0W

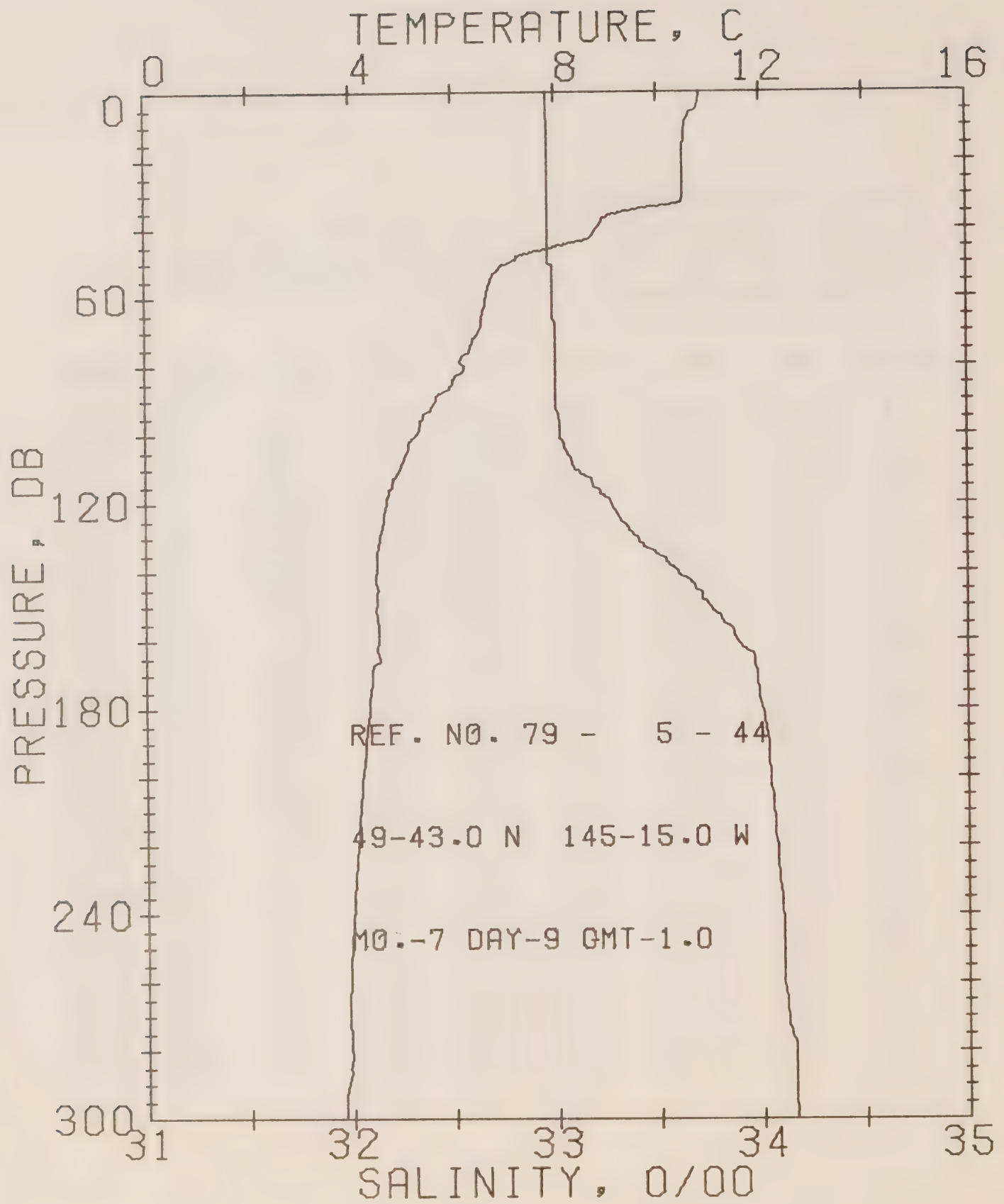
GMT 23.2

STATION C1

RESULTS OF STP CAST 184 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.56	32.98	0	25.30	267.8	.00	.00	1490.
10	10.38	32.98	10	25.33	265.0	.27	.01	1489.
20	10.32	32.98	20	25.34	264.3	.53	.05	1489.
30	10.32	32.98	30	25.35	264.4	.80	.12	1489.
40	8.63	32.98	40	25.62	238.6	1.05	.21	1483.
50	6.90	32.98	50	25.87	215.0	1.28	.32	1477.
60	6.48	32.98	60	25.92	209.8	1.49	.44	1475.
70	6.25	32.98	70	25.95	207.2	1.70	.57	1475.
80	6.00	32.98	79	25.98	204.2	1.91	.73	1474.
90	5.84	32.98	89	26.00	202.5	2.11	.91	1473.
100	5.50	32.99	99	26.05	197.9	2.31	1.10	1472.
110	5.22	33.03	109	26.11	191.8	2.51	1.31	1471.
120	4.94	33.17	119	26.26	178.4	2.69	1.53	1470.
130	4.51	33.34	129	26.44	161.2	2.86	1.75	1469.
140	4.43	33.53	139	26.60	145.7	3.02	1.96	1469.
150	4.50	33.75	149	26.76	130.5	3.15	2.16	1470.
160	4.50	33.85	159	26.84	123.1	3.28	2.36	1470.
170	4.55	33.94	169	26.91	117.0	3.40	2.56	1471.
180	4.57	34.03	179	26.98	110.6	3.51	2.76	1471.
190	4.56	34.06	189	27.00	108.3	3.62	2.97	1471.
200	4.50	34.08	199	27.02	106.5	3.73	3.18	1471.
210	4.42	34.08	208	27.03	105.5	3.83	3.40	1471.
220	4.34	34.09	218	27.05	104.0	3.94	3.63	1471.
230	4.26	34.10	228	27.07	102.5	4.04	3.87	1470.
240	4.17	34.11	238	27.08	100.9	4.14	4.11	1470.
250	4.15	34.12	248	27.09	100.0	4.24	4.36	1470.
260	4.05	34.13	258	27.11	98.3	4.34	4.62	1470.
270	3.99	34.14	268	27.13	97.0	4.44	4.88	1470.
280	4.02	34.15	278	27.13	96.5	4.54	5.15	1470.
290	4.00	34.17	288	27.15	95.1	4.63	5.43	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 44

DATE 9/ 7/79

POSITION 49-43.0N, 145-15.0W

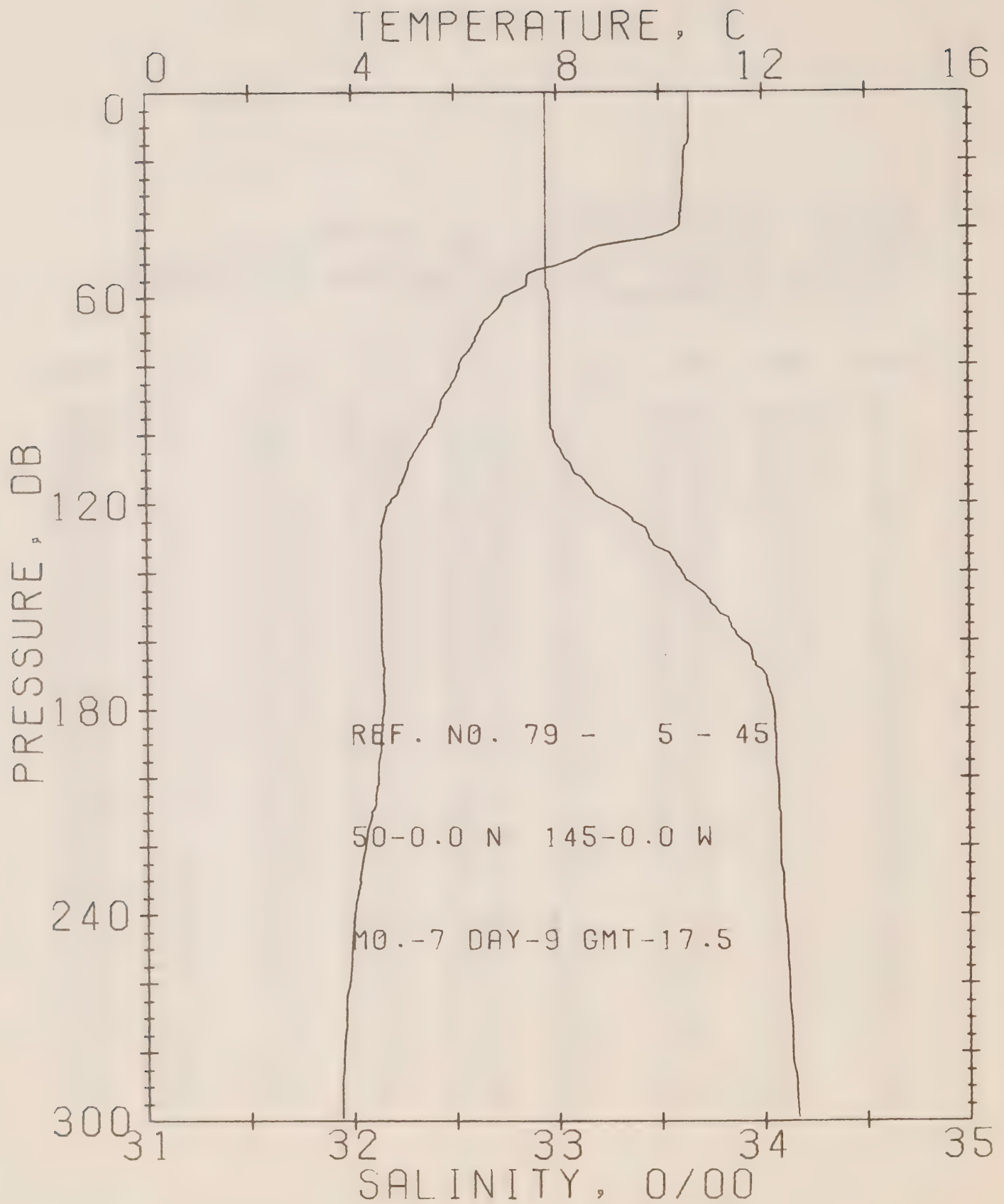
GMT 1.0

STATION W4

RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED; PRESSURES ARE INPUT

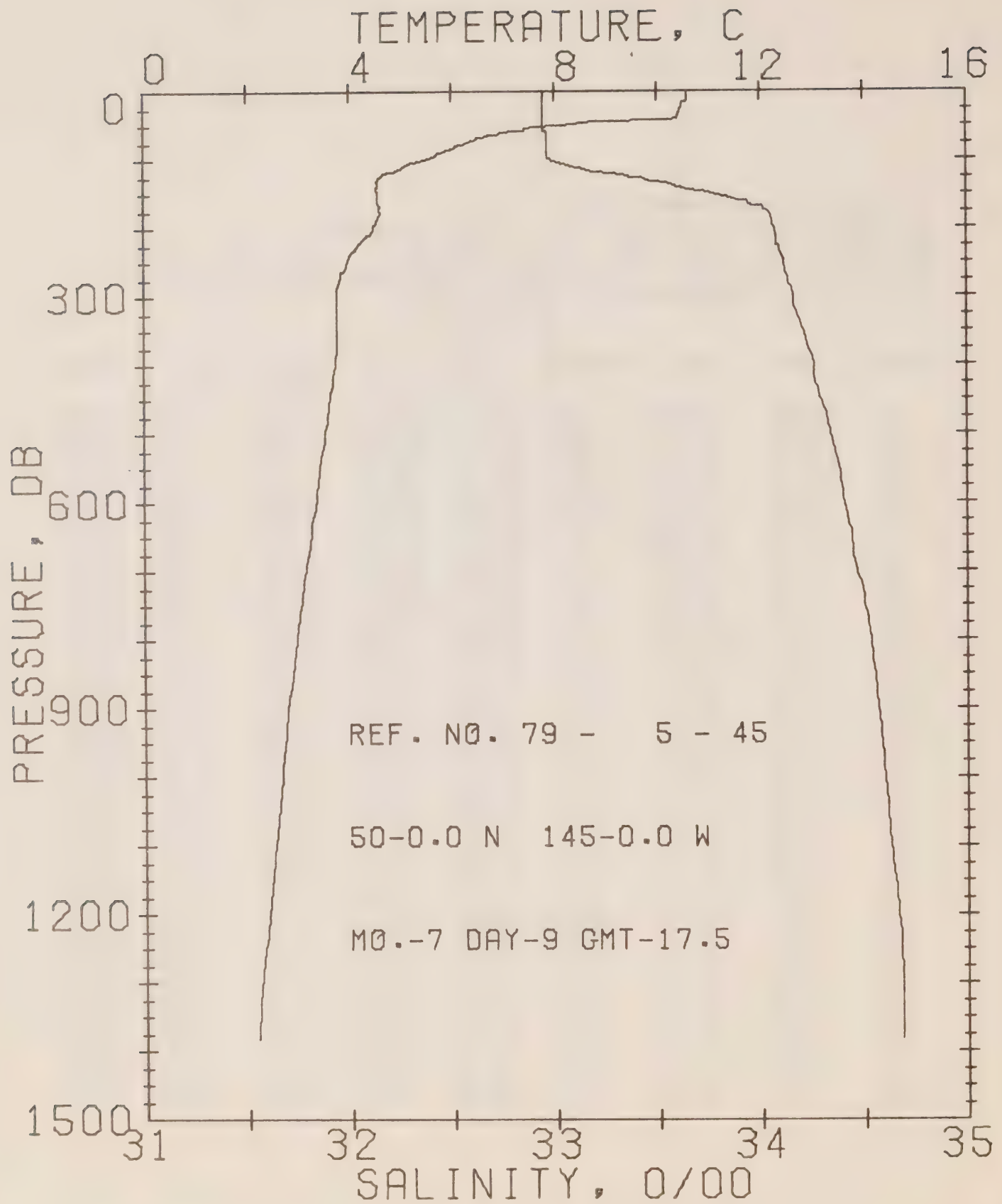
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.83	32.96	0	25.24	273.7	.00	.00	1491.
10	10.56	32.97	10	25.30	268.7	.27	.01	1490.
20	10.51	32.97	20	25.30	268.1	.54	.05	1490.
30	10.50	32.97	30	25.31	268.1	.81	.12	1490.
40	8.81	32.97	40	25.58	241.9	1.06	.21	1484.
50	7.08	32.97	50	25.83	218.1	1.29	.32	1478.
60	6.66	32.99	60	25.91	211.3	1.51	.44	1476.
70	6.51	33.00	70	25.93	208.8	1.72	.58	1476.
80	6.22	33.00	79	25.97	205.4	1.92	.74	1475.
90	5.68	33.00	89	26.04	199.1	2.12	.91	1473.
100	5.29	33.02	99	26.10	193.3	2.32	1.10	1471.
110	4.96	33.09	109	26.19	184.5	2.51	1.30	1470.
120	4.69	33.27	119	26.36	168.2	2.68	1.51	1469.
130	4.56	33.40	129	26.48	157.2	2.85	1.72	1469.
140	4.51	33.59	139	26.64	142.5	3.00	1.92	1469.
150	4.50	33.74	149	26.76	130.8	3.13	2.12	1470.
160	4.53	33.88	159	26.86	121.2	3.26	2.32	1470.
170	4.39	33.98	169	26.96	112.3	3.37	2.51	1470.
180	4.35	34.00	179	26.98	110.3	3.49	2.71	1470.
190	4.28	34.03	189	27.01	107.6	3.60	2.92	1470.
200	4.21	34.04	199	27.02	106.2	3.70	3.13	1470.
210	4.15	34.05	208	27.04	104.7	3.81	3.35	1470.
220	4.11	34.07	218	27.06	103.1	3.91	3.58	1470.
230	4.05	34.08	228	27.07	101.8	4.01	3.82	1470.
240	4.01	34.09	238	27.09	100.4	4.12	4.06	1470.
250	3.97	34.10	248	27.10	99.7	4.22	4.31	1470.
260	3.94	34.10	258	27.10	99.5	4.31	4.57	1470.
270	3.92	34.12	268	27.11	98.1	4.41	4.83	1470.
280	3.96	34.15	278	27.14	96.1	4.51	5.10	1470.
290	3.89	34.15	288	27.14	95.5	4.61	5.38	1470.
300	3.84	34.16	298	27.16	94.1	4.70	5.67	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 45 DATE 9/ 7/79
 POSITION 50- .0N, 145- .0W GMT 17.5 STATION P
 RESULTS OF STP CAST 160 POINTS TAKEN FROM ANALOG TRACE
 GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.60	32.95	0	25.27	270.7	.00	.00	1490.
10	10.60	32.95	10	25.27	270.9	.27	.01	1490.
20	10.48	32.95	20	25.29	269.1	.54	.06	1490.
30	10.45	32.95	30	25.30	268.7	.81	.12	1490.
40	10.36	32.95	40	25.31	267.5	1.08	.22	1490.
50	8.13	32.95	50	25.67	233.8	1.33	.33	1482.
60	6.97	32.96	60	25.84	217.5	1.55	.46	1477.
70	6.49	32.97	70	25.91	210.8	1.76	.60	1475.
80	6.09	32.97	80	25.96	206.1	1.97	.76	1474.
90	5.73	32.97	89	26.01	201.9	2.18	.94	1473.
100	5.44	32.98	99	26.05	197.9	2.38	1.13	1472.
110	5.08	33.07	109	26.16	187.3	2.57	1.34	1471.
120	4.71	33.25	119	26.34	169.9	2.75	1.55	1469.
130	4.55	33.45	129	26.52	153.3	2.91	1.75	1469.
140	4.55	33.60	139	26.64	142.1	3.06	1.95	1470.
150	4.56	33.77	149	26.77	129.7	3.19	2.15	1470.
160	4.57	33.90	159	26.87	120.1	3.32	2.35	1470.
170	4.58	34.01	169	26.96	112.1	3.43	2.55	1471.
180	4.59	34.05	179	26.99	109.4	3.54	2.74	1471.
190	4.54	34.06	189	27.00	108.1	3.65	2.95	1471.
200	4.48	34.07	199	27.02	107.1	3.76	3.16	1471.
210	4.34	34.08	208	27.04	104.7	3.87	3.38	1470.
220	4.24	34.08	218	27.05	103.7	3.97	3.61	1470.
230	4.11	34.09	228	27.07	101.7	4.07	3.85	1470.
240	4.01	34.10	238	27.09	100.0	4.17	4.09	1470.
250	3.97	34.11	248	27.10	98.9	4.27	4.34	1470.
260	3.92	34.12	258	27.12	97.7	4.37	4.59	1470.
270	3.84	34.13	268	27.13	96.5	4.47	4.86	1469.
280	3.80	34.13	278	27.14	95.9	4.57	5.13	1469.
290	3.77	34.15	288	27.16	94.2	4.66	5.40	1469.
300	3.77	34.16	298	27.16	93.6	4.75	5.68	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 45

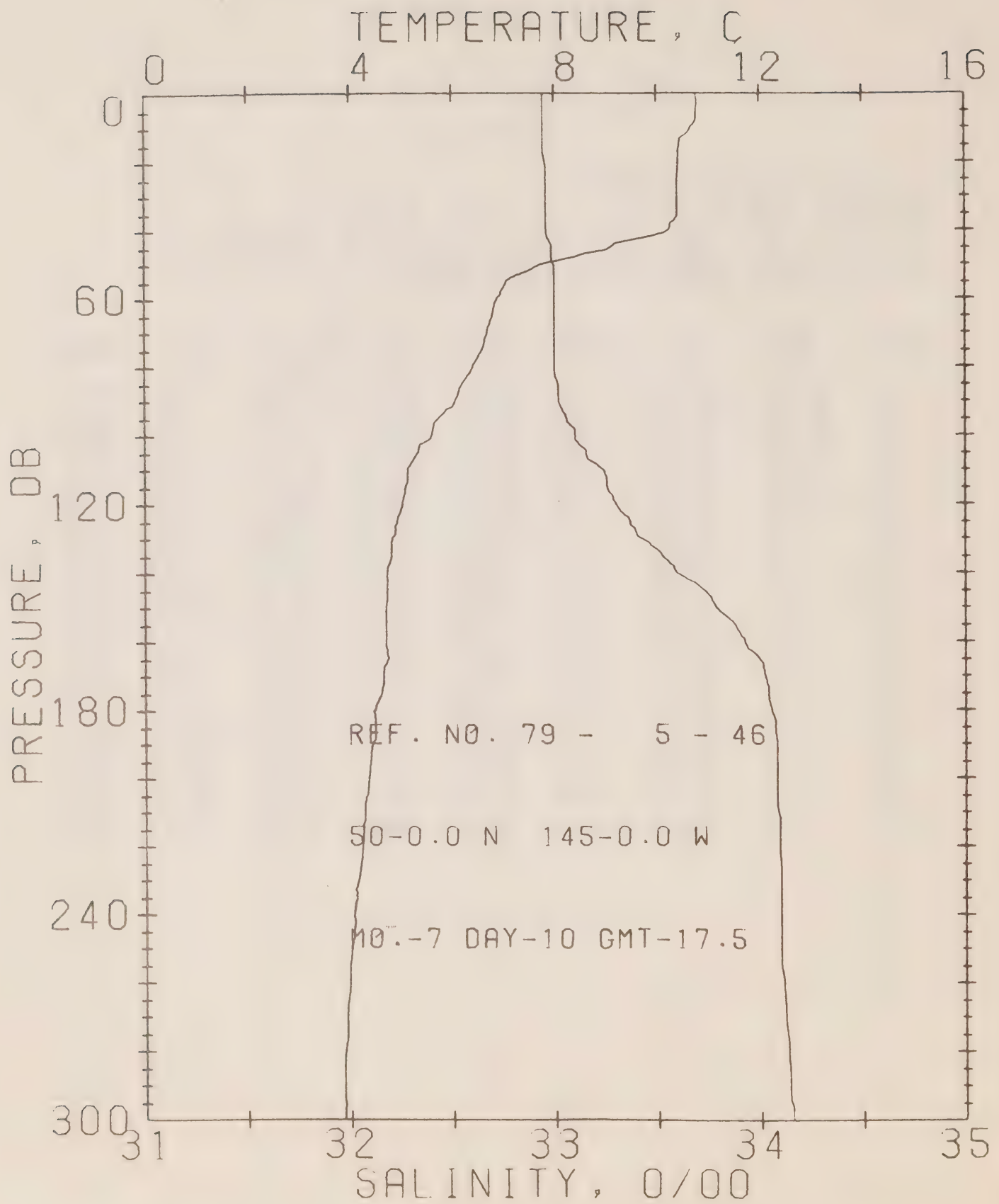
DATE 9/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 250 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.60	32.95	0	25.27	270.7	.00	.00	1490.
10	10.60	32.95	10	25.27	270.9	.27	.01	1490.
20	10.48	32.95	20	25.29	269.1	.54	.06	1490.
30	10.45	32.95	30	25.30	268.7	.81	.12	1490.
50	8.13	32.95	50	25.67	233.8	1.33	.33	1482.
75	6.31	32.97	75	25.94	208.7	1.87	.68	1475.
100	5.44	32.98	99	26.05	197.9	2.38	1.13	1472.
125	4.59	33.37	124	26.45	159.7	2.83	1.65	1469.
150	4.56	33.77	149	26.77	129.7	3.19	2.15	1470.
175	4.60	34.03	174	26.98	110.6	3.49	2.64	1471.
200	4.48	34.07	199	27.02	107.1	3.76	3.16	1471.
225	4.17	34.08	223	27.06	103.0	4.02	3.73	1470.
250	3.97	34.11	248	27.10	98.9	4.27	4.34	1470.
300	3.77	34.16	298	27.16	93.6	4.75	5.68	1470.
400	3.73	34.26	397	27.25	86.5	5.66	8.91	1471.
500	3.53	34.34	496	27.33	79.2	6.49	12.71	1472.
600	3.34	34.41	595	27.40	73.0	7.25	16.95	1473.
800	2.95	34.53	793	27.54	61.2	8.58	26.45	1475.
1000	2.66	34.60	990	27.62	54.1	9.73	36.97	1477.
1200	2.40	34.66	1188	27.69	48.0	10.76	48.44	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 46

DATE 10/ 7/79

POSITION 50- .0N, 145- .0W

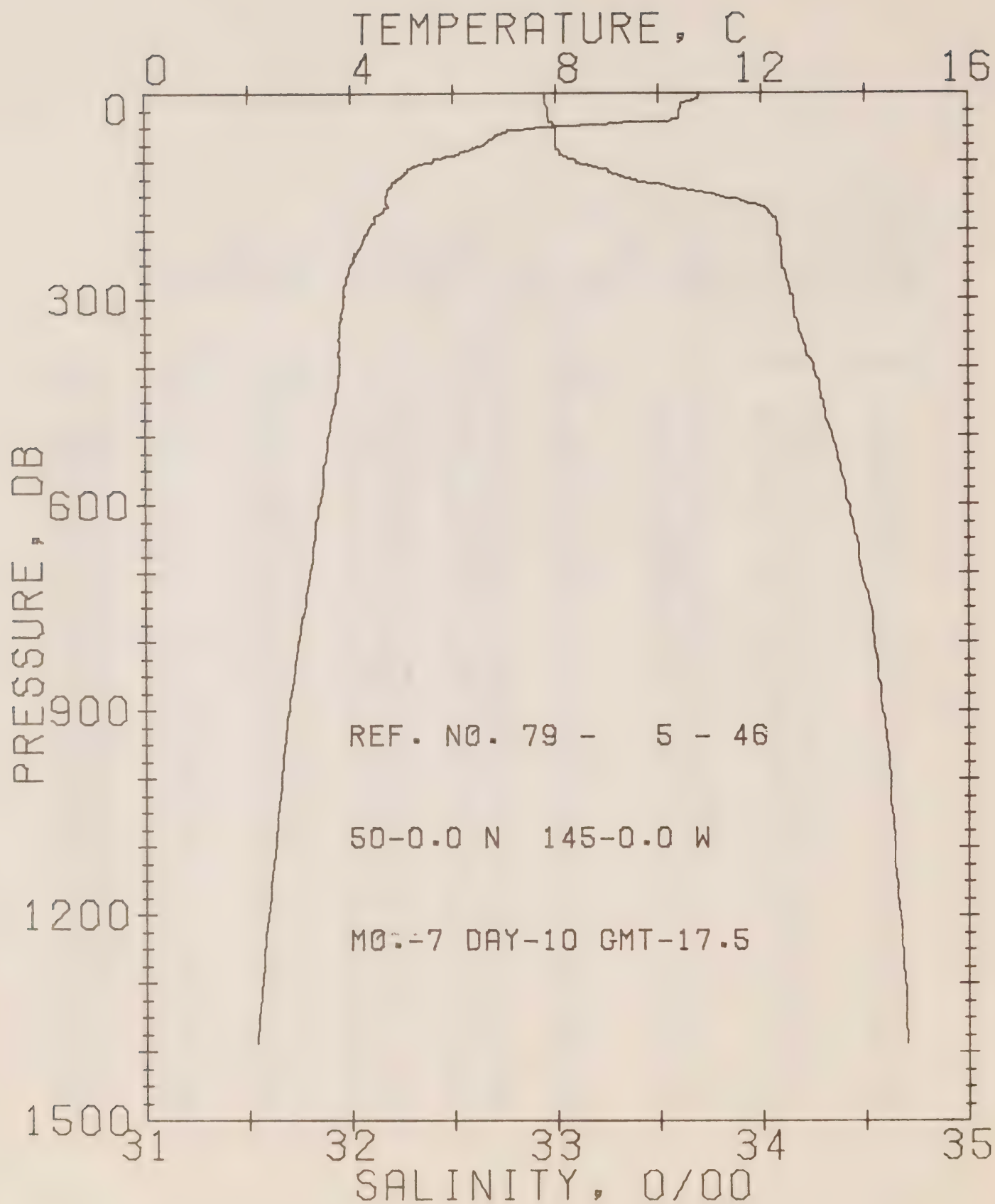
GMT 17.5

STATION P

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.78	32.95	0	25.24	273.6	.00	.00	1491.
10	10.67	32.95	10	25.26	272.0	.27	.01	1490.
20	10.42	32.96	20	25.31	267.6	.54	.06	1490.
30	10.39	32.96	30	25.32	267.1	.81	.12	1490.
40	10.23	32.96	40	25.34	264.7	1.08	.22	1489.
50	7.73	33.00	50	25.77	224.5	1.32	.33	1480.
60	6.87	33.00	60	25.89	213.2	1.54	.45	1477.
70	6.69	33.00	70	25.91	211.0	1.75	.59	1476.
80	6.41	33.00	79	25.95	207.7	1.96	.75	1475.
90	6.04	33.02	89	26.01	201.8	2.17	.93	1474.
100	5.60	33.10	99	26.12	190.8	2.36	1.12	1473.
110	5.13	33.24	109	26.29	175.1	2.55	1.32	1471.
120	5.01	33.30	119	26.35	169.4	2.72	1.52	1471.
130	4.84	33.42	129	26.47	158.7	2.88	1.73	1470.
140	4.71	33.59	139	26.61	144.6	3.03	1.93	1470.
150	4.70	33.79	149	26.77	129.7	3.17	2.13	1471.
160	4.69	33.93	159	26.89	119.2	3.29	2.33	1471.
170	4.64	34.02	169	26.96	111.7	3.41	2.52	1471.
180	4.48	34.05	179	27.00	108.1	3.52	2.72	1471.
190	4.43	34.08	189	27.03	105.4	3.62	2.92	1471.
200	4.35	34.08	199	27.04	104.7	3.73	3.13	1470.
210	4.28	34.09	208	27.05	103.5	3.83	3.35	1470.
220	4.22	34.09	218	27.06	102.8	3.94	3.57	1470.
230	4.14	34.10	228	27.08	101.3	4.04	3.81	1470.
240	4.06	34.10	238	27.09	100.6	4.14	4.05	1470.
250	4.01	34.10	248	27.09	100.1	4.24	4.30	1470.
260	3.97	34.11	258	27.10	99.0	4.34	4.56	1470.
270	3.93	34.12	268	27.12	97.9	4.44	4.82	1470.
280	3.89	34.13	278	27.13	96.9	4.53	5.10	1470.
290	3.86	34.14	288	27.14	95.9	4.63	5.38	1470.
300	3.86	34.15	298	27.15	95.2	4.73	5.66	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 46

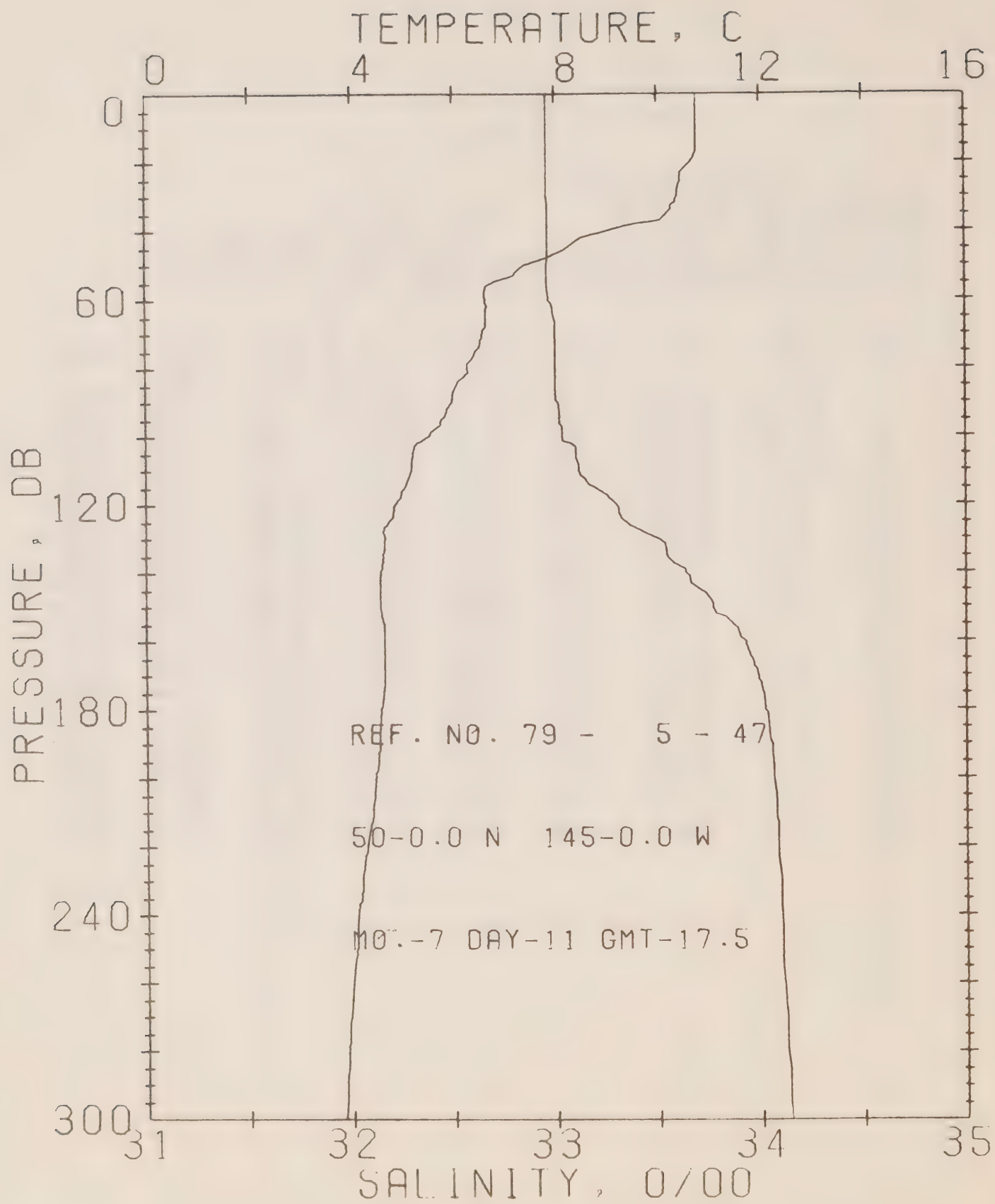
DATE 10/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 303 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.78	32.95	0	25.24	273.6	.00	.00	1491.
10	10.67	32.95	10	25.26	272.0	.27	.01	1490.
20	10.42	32.96	20	25.31	267.6	.54	.06	1490.
30	10.39	32.96	30	25.32	267.1	.81	.12	1490.
50	7.73	33.00	50	25.77	224.5	1.32	.33	1480.
75	6.59	33.00	75	25.92	209.9	1.86	.67	1476.
100	5.60	33.10	99	26.12	190.8	2.36	1.12	1473.
125	4.90	33.37	124	26.42	163.0	2.80	1.62	1470.
150	4.70	33.79	149	26.77	129.7	3.17	2.13	1471.
175	4.60	34.04	174	26.98	110.1	3.46	2.62	1471.
200	4.35	34.08	199	27.04	104.7	3.73	3.13	1470.
225	4.19	34.10	223	27.07	102.0	3.99	3.69	1470.
250	4.01	34.10	248	27.09	100.1	4.24	4.30	1470.
300	3.86	34.15	298	27.15	95.2	4.73	5.66	1470.
400	3.79	34.25	397	27.23	87.9	5.65	8.94	1471.
500	3.56	34.34	496	27.33	79.6	6.48	12.78	1472.
600	3.38	34.42	595	27.41	72.4	7.24	17.03	1473.
800	2.98	34.54	793	27.54	60.7	8.57	26.44	1475.
1000	2.64	34.62	990	27.64	52.5	9.69	36.74	1477.
1200	2.37	34.66	1188	27.69	47.4	10.70	47.99	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 47

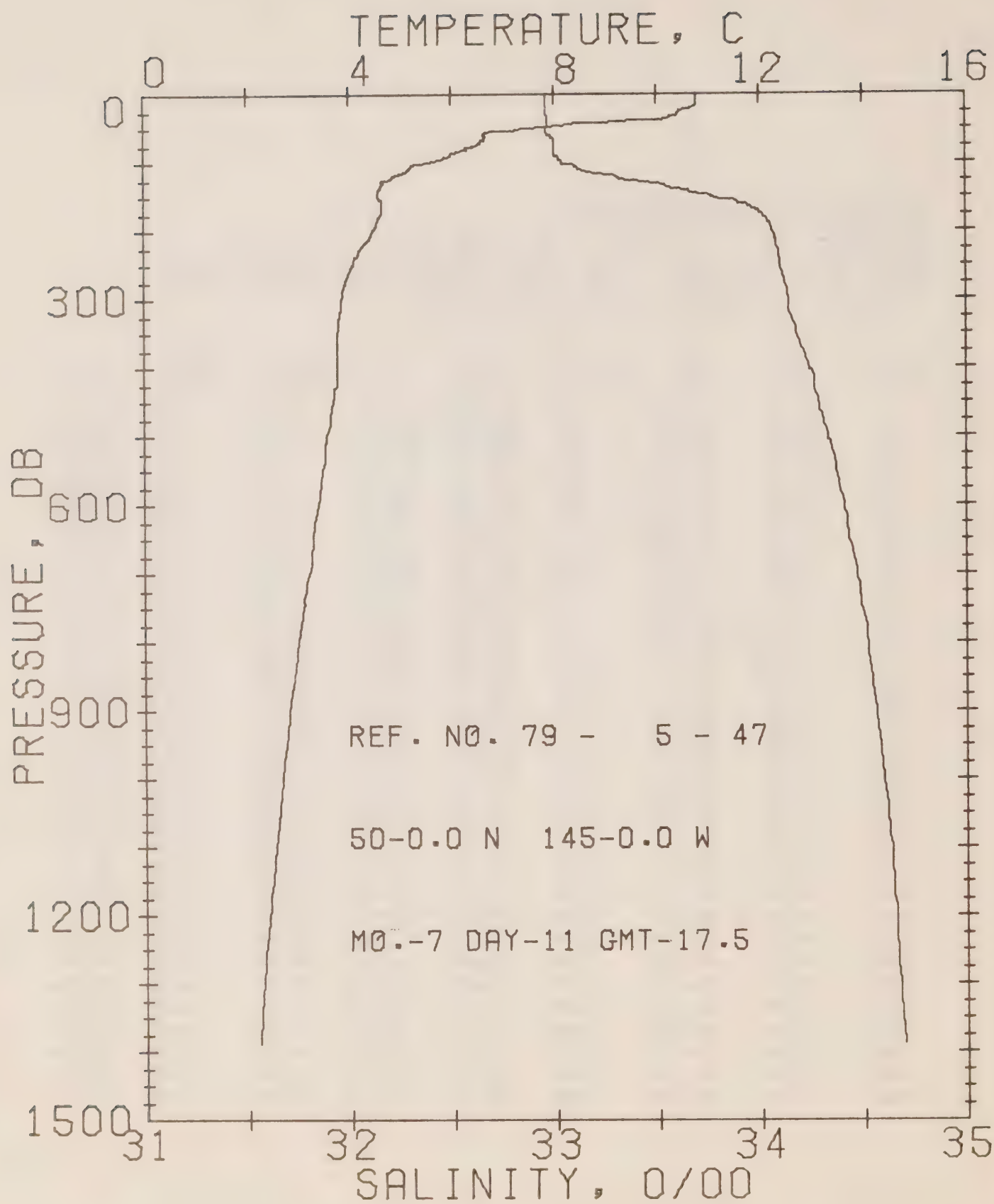
DATE 11/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.78	32.96	0	25.25	272.9	.00	.00	1491.
10	10.78	32.96	10	25.25	273.1	.27	.01	1491.
20	10.67	32.96	20	25.27	271.5	.55	.06	1491.
30	10.39	32.96	30	25.32	267.1	.81	.12	1490.
40	9.04	32.97	40	25.55	245.4	1.07	.22	1485.
50	7.40	32.96	50	25.78	223.0	1.31	.32	1479.
60	6.63	32.97	60	25.89	212.4	1.52	.44	1476.
70	6.56	33.00	70	25.93	209.4	1.74	.58	1476.
80	6.28	33.00	79	25.96	206.2	1.94	.74	1475.
90	5.98	33.01	89	26.01	201.9	2.15	.92	1474.
100	5.51	33.03	99	26.08	195.0	2.35	1.11	1472.
110	5.17	33.11	109	26.18	185.3	2.53	1.31	1471.
120	4.86	33.30	119	26.37	167.8	2.71	1.52	1470.
130	4.66	33.50	129	26.55	150.8	2.87	1.73	1470.
140	4.56	33.63	139	26.66	140.0	3.02	1.93	1470.
150	4.57	33.77	149	26.77	129.8	3.15	2.13	1470.
160	4.64	33.93	159	26.89	118.6	3.28	2.32	1471.
170	4.65	33.99	169	26.94	114.3	3.39	2.52	1471.
180	4.57	34.02	179	26.97	111.3	3.51	2.72	1471.
190	4.54	34.05	189	27.00	108.9	3.62	2.93	1471.
200	4.45	34.06	199	27.01	107.2	3.72	3.14	1471.
210	4.39	34.07	208	27.03	106.0	3.83	3.36	1471.
220	4.29	34.08	218	27.05	104.3	3.94	3.59	1470.
230	4.18	34.09	228	27.07	102.4	4.04	3.83	1470.
240	4.10	34.09	238	27.08	101.3	4.14	4.07	1470.
250	4.07	34.10	248	27.09	100.7	4.24	4.33	1470.
260	4.00	34.11	258	27.10	99.6	4.34	4.59	1470.
270	3.96	34.12	268	27.11	98.2	4.44	4.85	1470.
280	3.89	34.12	278	27.12	97.5	4.54	5.13	1470.
290	3.87	34.13	288	27.13	96.8	4.64	5.41	1470.
300	3.83	34.14	298	27.14	95.7	4.73	5.70	1470.



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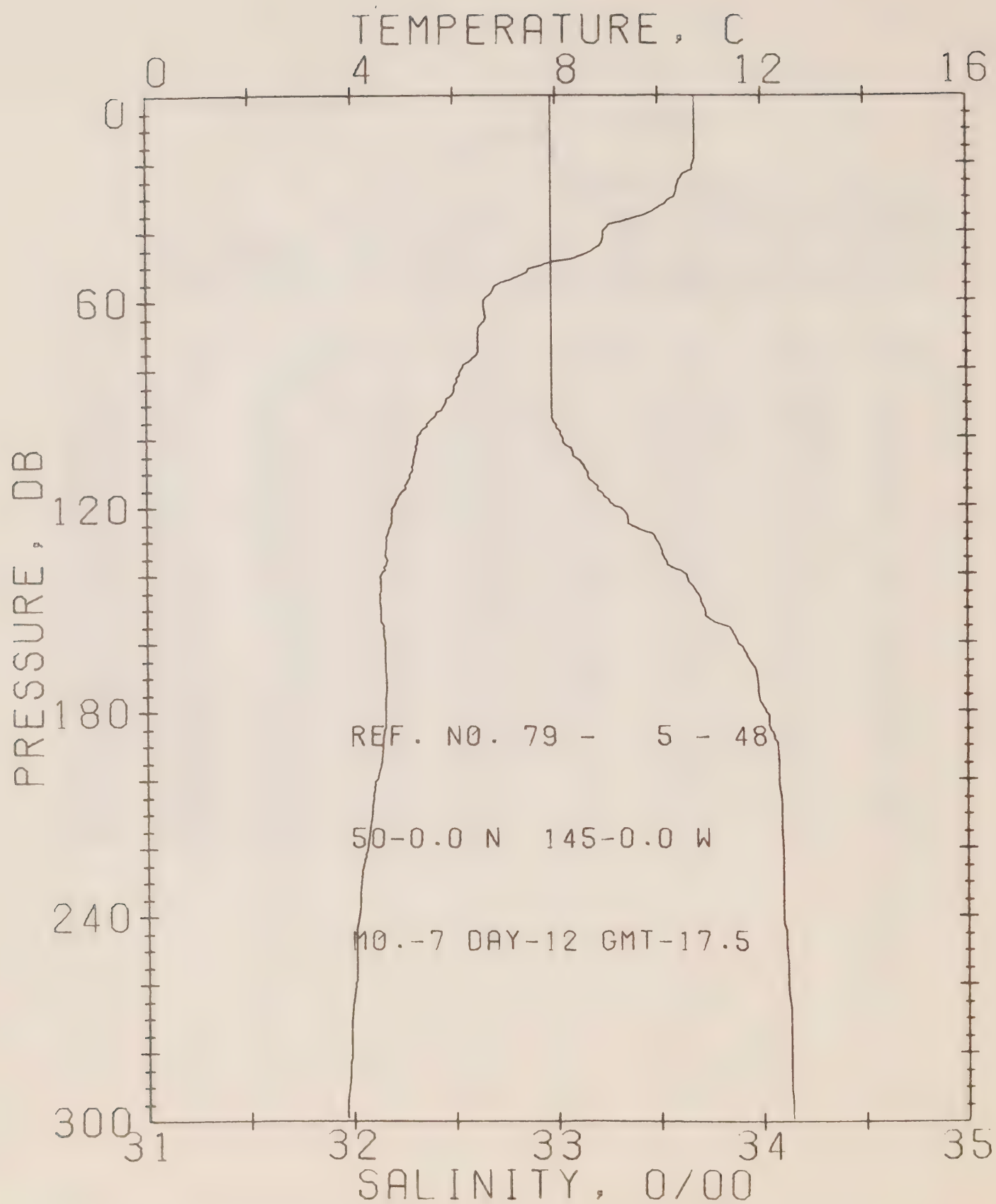
REFERENCE NO. 79- 5- 47

DATE 11/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 273 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.78	32.96	0	25.25	272.9	.00	.00	1491.
10	10.78	32.96	10	25.25	273.1	.27	.01	1491.
20	10.67	32.96	20	25.27	271.5	.55	.06	1491.
30	10.39	32.96	30	25.32	267.1	.81	.12	1490.
50	7.40	32.96	50	25.78	223.0	1.31	.32	1479.
75	6.44	33.00	75	25.94	208.0	1.84	.66	1475.
100	5.51	33.03	99	26.08	195.0	2.35	1.11	1472.
125	4.72	33.35	124	26.42	162.6	2.79	1.62	1470.
150	4.57	33.77	149	26.77	129.8	3.15	2.13	1470.
175	4.62	34.01	174	26.96	112.6	3.45	2.62	1471.
200	4.45	34.06	199	27.01	107.2	3.72	3.14	1471.
225	4.23	34.08	223	27.06	103.4	3.99	3.71	1470.
250	4.07	34.10	248	27.09	100.7	4.24	4.33	1470.
300	3.83	34.14	298	27.14	95.7	4.73	5.70	1470.
400	3.76	34.23	397	27.22	88.8	5.66	9.00	1471.
500	3.56	34.33	496	27.32	80.3	6.51	12.88	1472.
600	3.38	34.41	595	27.40	73.2	7.27	17.17	1473.
800	2.98	34.52	793	27.52	62.5	8.63	26.80	1475.
1000	2.66	34.59	990	27.61	54.9	9.80	37.50	1477.
1200	2.40	34.65	1188	27.68	48.7	10.83	49.02	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 48

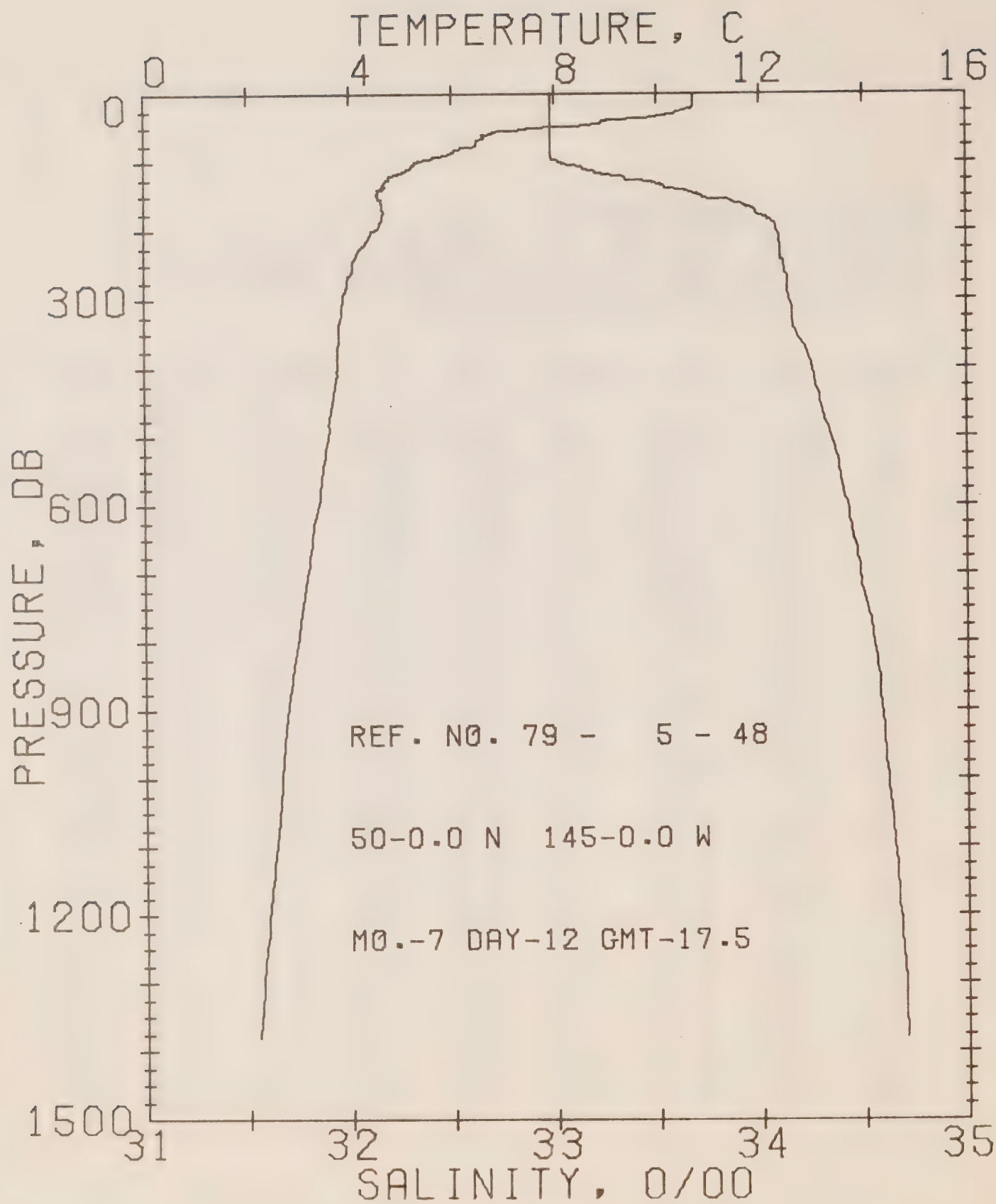
DATE 12/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.70	32.98	0	25.28	270.1	.00	.00	1490.
10	10.72	32.98	10	25.28	270.6	.27	.01	1491.
20	10.69	32.98	20	25.28	270.3	.54	.06	1491.
30	10.31	32.98	30	25.35	264.3	.81	.12	1489.
40	8.94	32.98	40	25.57	243.1	1.06	.21	1485.
50	7.68	32.98	50	25.76	225.3	1.30	.32	1480.
60	6.59	32.98	60	25.91	211.2	1.52	.44	1476.
70	6.47	32.98	70	25.92	209.8	1.73	.58	1475.
80	6.15	32.98	79	25.96	206.0	1.94	.74	1474.
90	5.85	32.98	89	26.00	202.6	2.14	.92	1473.
100	5.29	33.03	99	26.11	192.5	2.34	1.11	1471.
110	5.16	33.15	109	26.22	182.2	2.53	1.31	1471.
120	4.82	33.28	119	26.36	168.8	2.70	1.52	1470.
130	4.68	33.49	129	26.54	151.7	2.86	1.72	1470.
140	4.56	33.63	139	26.66	140.0	3.01	1.93	1470.
150	4.55	33.72	149	26.73	133.3	3.15	2.13	1470.
160	4.63	33.88	159	26.85	122.3	3.28	2.33	1471.
170	4.66	33.98	169	26.93	115.5	3.39	2.53	1471.
180	4.63	34.02	179	26.96	112.0	3.51	2.73	1471.
190	4.57	34.07	189	27.01	107.6	3.62	2.94	1471.
200	4.48	34.08	199	27.03	106.1	3.73	3.15	1471.
210	4.36	34.09	208	27.05	104.1	3.83	3.37	1471.
220	4.28	34.10	218	27.06	102.8	3.93	3.60	1470.
230	4.15	34.10	228	27.08	101.4	4.04	3.83	1470.
240	4.11	34.10	238	27.08	101.0	4.14	4.08	1470.
250	4.05	34.11	248	27.10	99.5	4.24	4.33	1470.
260	4.02	34.12	258	27.11	98.8	4.34	4.58	1470.
270	3.97	34.13	268	27.12	97.6	4.43	4.85	1470.
280	3.94	34.13	278	27.12	97.4	4.53	5.12	1470.
290	3.90	34.13	288	27.13	97.0	4.63	5.40	1470.
300	3.86	34.14	298	27.14	95.9	4.73	5.69	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 48

DATE 12/ 7/79

POSITION 50- .0N, 145- .0W

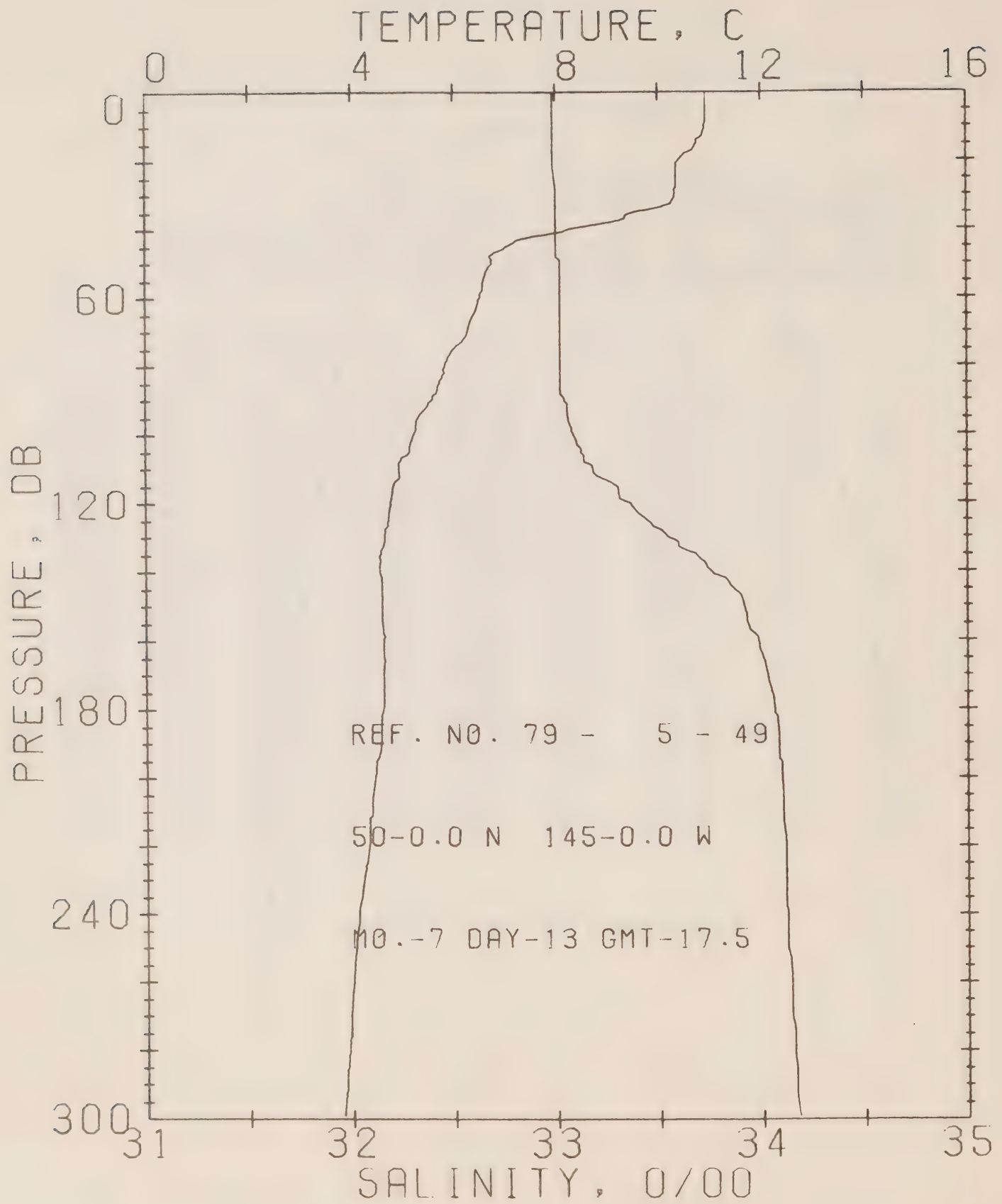
GMT 17.5

STATION P

RESULTS OF STP CAST 265 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

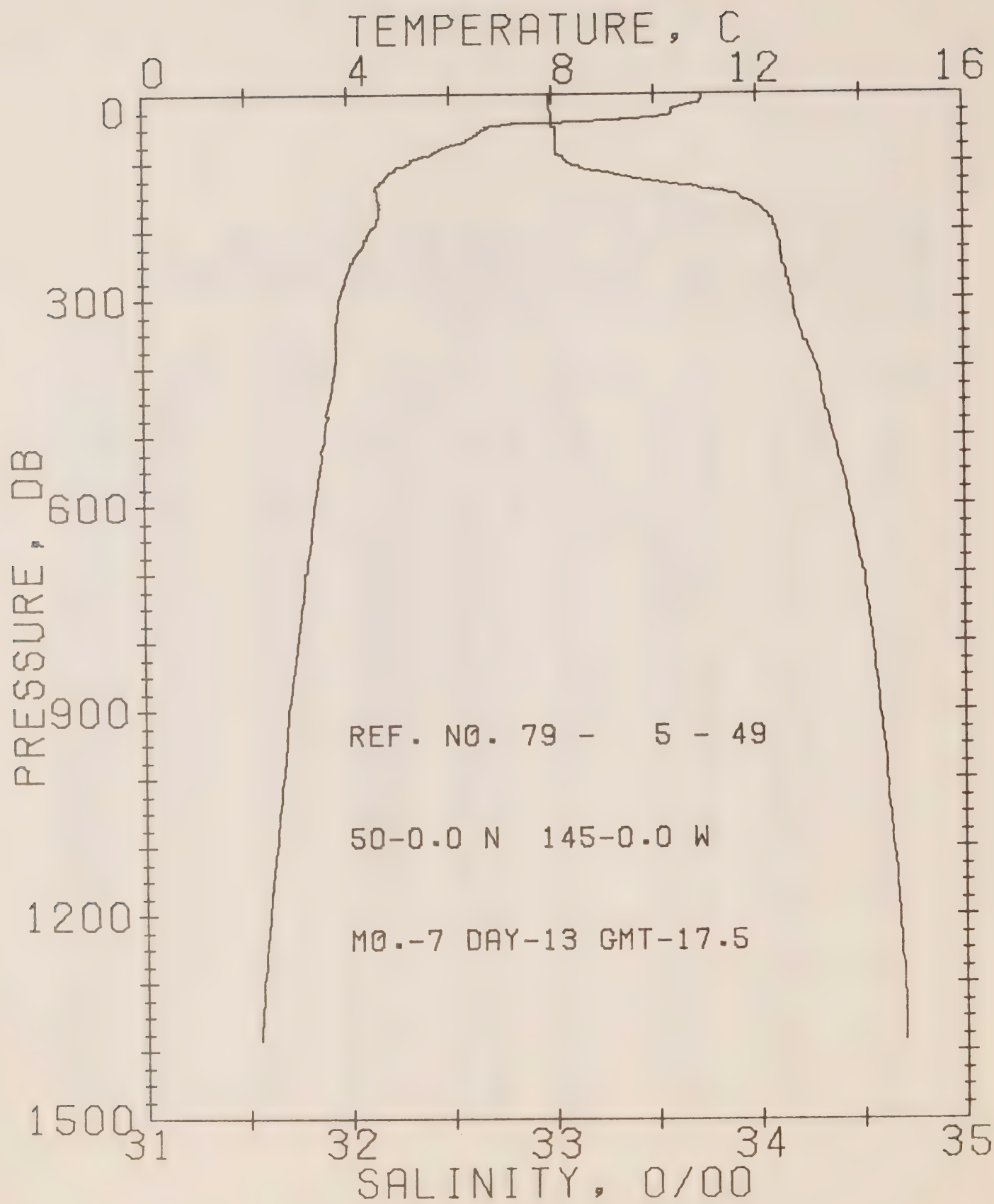
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.70	32.98	0	25.28	270.1	.00	.00	1490.
10	10.72	32.98	10	25.28	270.6	.27	.01	1491.
20	10.69	32.98	20	25.28	270.3	.54	.06	1491.
30	10.31	32.98	30	25.35	264.3	.81	.12	1489.
50	7.68	32.98	50	25.76	225.3	1.30	.32	1480.
75	6.47	32.98	75	25.92	209.9	1.83	.66	1476.
100	5.29	33.03	99	26.11	192.5	2.34	1.11	1471.
125	4.77	33.35	124	26.42	163.1	2.79	1.62	1470.
150	4.55	33.72	149	26.73	133.3	3.15	2.13	1470.
175	4.66	33.98	174	26.93	115.0	3.45	2.63	1471.
200	4.48	34.08	199	27.03	106.1	3.73	3.15	1471.
225	4.21	34.10	223	27.07	101.9	3.99	3.72	1470.
250	4.05	34.11	248	27.10	99.5	4.24	4.33	1470.
300	3.86	34.14	298	27.14	95.9	4.73	5.69	1470.
400	3.76	34.25	397	27.24	87.7	5.65	8.98	1471.
500	3.57	34.34	496	27.33	79.6	6.49	12.81	1472.
600	3.37	34.42	595	27.41	72.2	7.24	17.06	1473.
800	2.96	34.55	793	27.55	60.1	8.57	26.45	1475.
1000	2.64	34.61	990	27.63	53.2	9.69	36.75	1477.
1200	2.39	34.67	1188	27.69	47.4	10.70	48.00	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 49 DATE 13/ 7/79
 POSITION 50- .0N, 145- .0W GMT 17.5 STATION P
 RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.93	32.99	0	25.25	273.2	.00	.00	1491.
10	10.92	32.99	10	25.25	273.2	.27	.01	1491.
20	10.40	32.99	20	25.34	264.8	.54	.06	1490.
30	10.33	33.00	30	25.36	263.1	.81	.12	1489.
40	8.23	33.00	40	25.69	231.3	1.06	.21	1482.
50	6.74	33.02	50	25.92	210.0	1.28	.31	1476.
60	6.51	33.02	60	25.95	207.2	1.48	.43	1475.
70	6.27	33.02	70	25.98	204.4	1.69	.56	1475.
80	5.80	33.02	79	26.04	198.9	1.89	.72	1473.
90	5.56	33.04	89	26.08	194.7	2.09	.89	1472.
100	5.21	33.08	99	26.16	187.8	2.28	1.07	1471.
110	4.93	33.17	109	26.26	177.7	2.46	1.27	1470.
120	4.75	33.36	119	26.43	162.1	2.63	1.47	1470.
130	4.63	33.54	129	26.58	147.4	2.79	1.67	1470.
140	4.55	33.75	139	26.76	130.9	2.93	1.86	1470.
150	4.58	33.91	149	26.89	119.0	3.05	2.04	1470.
160	4.62	33.98	159	26.94	114.4	3.17	2.22	1471.
170	4.62	34.03	169	26.97	111.3	3.28	2.41	1471.
180	4.59	34.06	179	27.00	108.6	3.39	2.61	1471.
190	4.57	34.08	189	27.02	106.9	3.50	2.81	1471.
200	4.42	34.09	199	27.04	104.7	3.60	3.02	1471.
210	4.36	34.10	208	27.06	103.4	3.71	3.24	1471.
220	4.31	34.11	218	27.07	102.2	3.81	3.46	1471.
230	4.20	34.11	228	27.08	101.1	3.91	3.70	1470.
240	4.11	34.12	238	27.10	99.5	4.01	3.94	1470.
250	4.04	34.12	248	27.11	98.9	4.11	4.19	1470.
260	4.00	34.14	258	27.13	97.1	4.21	4.44	1470.
270	3.96	34.14	268	27.13	96.7	4.31	4.70	1470.
280	3.91	34.15	278	27.14	95.6	4.40	4.97	1470.
290	3.86	34.16	288	27.15	94.4	4.50	5.25	1470.
300	3.82	34.17	298	27.17	93.3	4.59	5.53	1470.



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REFERENCE NO. 79- 5- 49

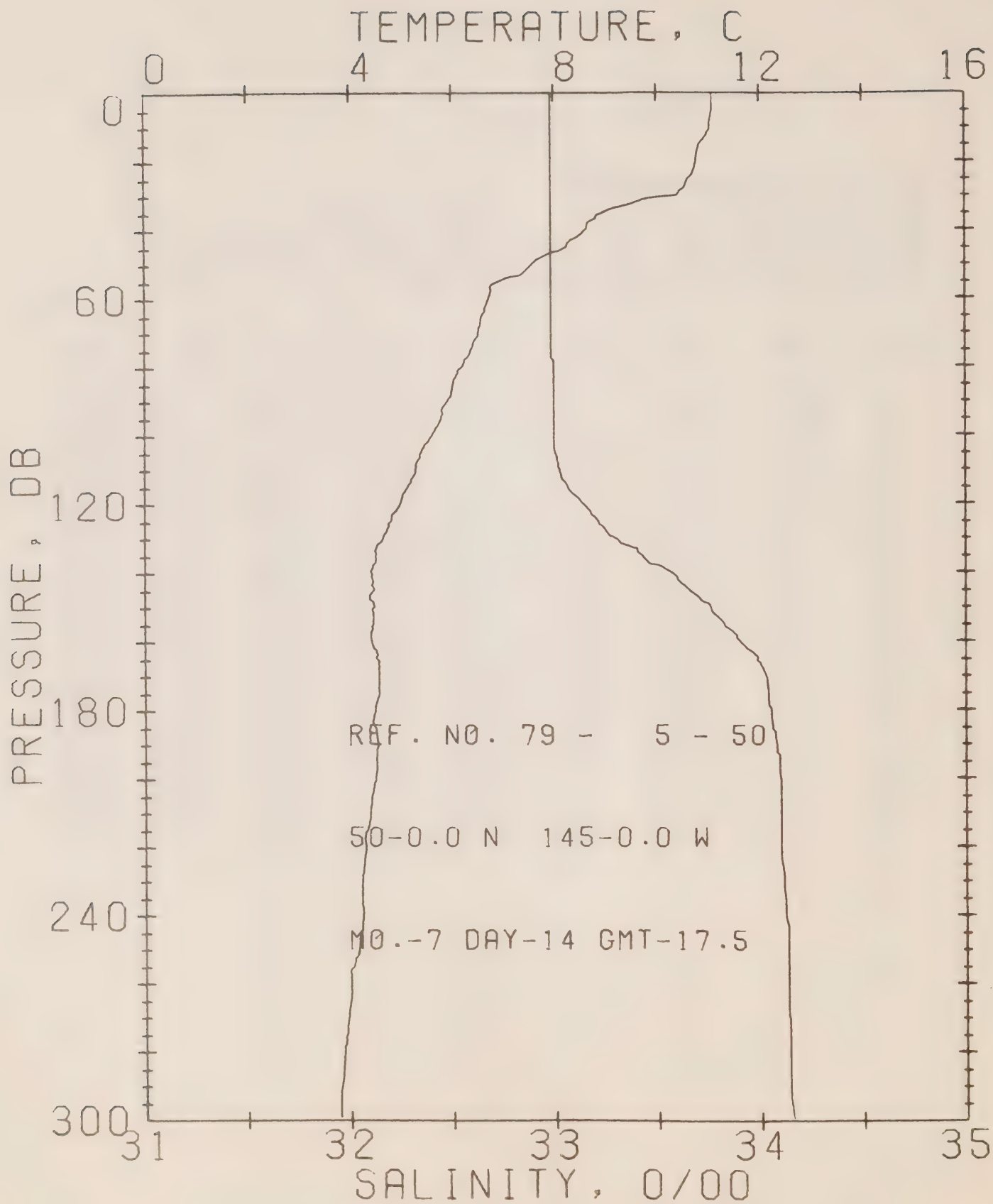
DATE 13/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 268 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	10.93	32.99	0	25.25	273.2	.00	.00	1491.
10	10.92	32.99	10	25.25	273.2	.27	.01	1491.
20	10.40	32.99	20	25.34	264.8	.54	.06	1490.
30	10.33	33.00	30	25.36	263.1	.81	.12	1489.
50	6.74	33.02	50	25.92	210.0	1.28	.31	1476.
75	5.98	33.02	75	26.02	200.9	1.79	.64	1474.
100	5.21	33.08	99	26.16	187.8	2.28	1.07	1471.
125	4.71	33.45	124	26.50	155.0	2.71	1.57	1470.
150	4.58	33.91	149	26.89	119.0	3.05	2.04	1470.
175	4.60	34.05	174	26.99	109.8	3.34	2.51	1471.
200	4.42	34.09	199	27.04	104.7	3.60	3.02	1471.
225	4.27	34.11	223	27.07	101.8	3.86	3.58	1470.
250	4.04	34.12	248	27.11	98.9	4.11	4.19	1470.
300	3.82	34.17	298	27.17	93.3	4.59	5.53	1470.
400	3.73	34.29	397	27.27	84.6	5.49	8.72	1471.
500	3.52	34.36	496	27.35	77.4	6.30	12.43	1472.
600	3.32	34.44	595	27.43	70.4	7.03	16.55	1473.
800	2.96	34.55	793	27.55	59.9	8.33	25.75	1475.
1000	2.68	34.61	990	27.63	53.3	9.45	36.07	1477.
1200	2.40	34.67	1188	27.70	47.2	10.46	47.27	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 50

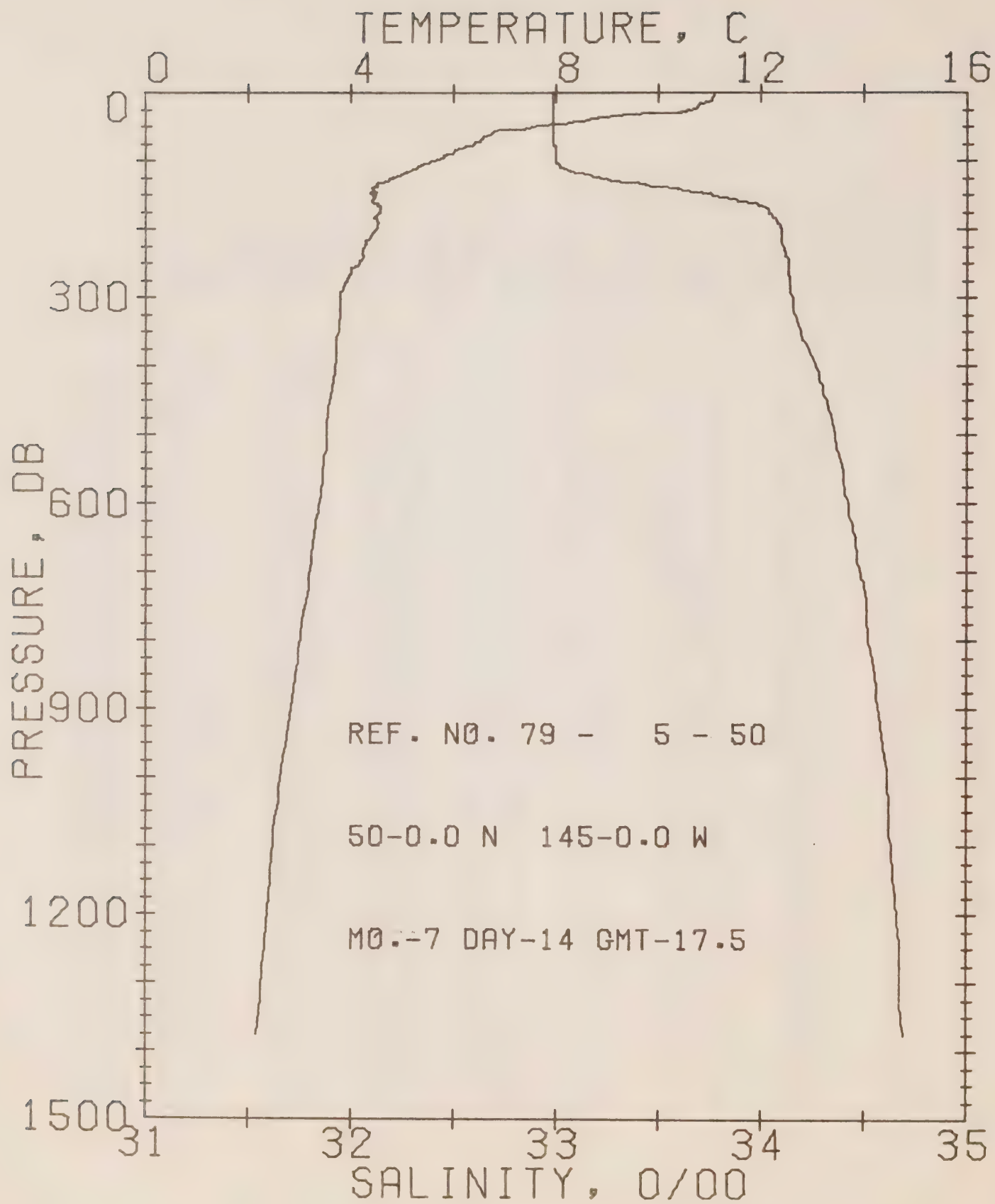
DATE 14/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 200 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.08	32.99	0	25.22	275.7	.00	.00	1492.
10	11.05	32.99	10	25.23	275.4	.28	.01	1492.
20	10.78	32.99	20	25.27	271.1	.55	.06	1491.
30	10.39	32.99	30	25.34	264.9	.82	.12	1490.
40	8.63	32.99	40	25.63	237.8	1.06	.21	1483.
50	7.60	32.99	50	25.78	223.4	1.29	.32	1480.
60	6.73	32.99	60	25.90	212.2	1.51	.44	1476.
70	6.52	32.99	70	25.92	209.7	1.72	.58	1476.
80	6.21	33.00	79	25.97	205.3	1.93	.74	1475.
90	5.92	33.00	89	26.01	201.8	2.13	.91	1474.
100	5.60	33.00	99	26.05	198.3	2.33	1.11	1472.
110	5.29	33.03	109	26.10	192.9	2.53	1.32	1471.
120	4.99	33.14	119	26.23	181.2	2.72	1.54	1470.
130	4.65	33.30	129	26.39	165.6	2.89	1.76	1469.
140	4.41	33.57	139	26.63	143.0	3.04	1.97	1469.
150	4.47	33.76	149	26.77	129.4	3.18	2.17	1470.
160	4.42	33.90	159	26.90	118.1	3.30	2.37	1470.
170	4.56	34.03	169	26.98	110.4	3.42	2.56	1471.
180	4.48	34.05	179	27.00	108.1	3.53	2.75	1471.
190	4.54	34.08	189	27.02	106.6	3.63	2.95	1471.
200	4.49	34.10	199	27.04	104.7	3.74	3.17	1471.
210	4.38	34.10	208	27.05	103.6	3.84	3.38	1471.
220	4.30	34.10	218	27.06	102.9	3.95	3.61	1470.
230	4.22	34.11	228	27.08	101.3	4.05	3.84	1470.
240	4.23	34.12	238	27.09	100.8	4.15	4.08	1471.
250	4.15	34.13	248	27.10	99.3	4.25	4.33	1470.
260	3.99	34.13	258	27.12	97.7	4.35	4.59	1470.
270	3.94	34.14	268	27.13	96.5	4.45	4.85	1470.
280	3.87	34.14	278	27.14	96.0	4.54	5.12	1470.
290	3.81	34.14	288	27.14	95.4	4.64	5.40	1470.
300	3.79	34.15	298	27.15	94.5	4.73	5.69	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 50

DATE 14/ 7/79

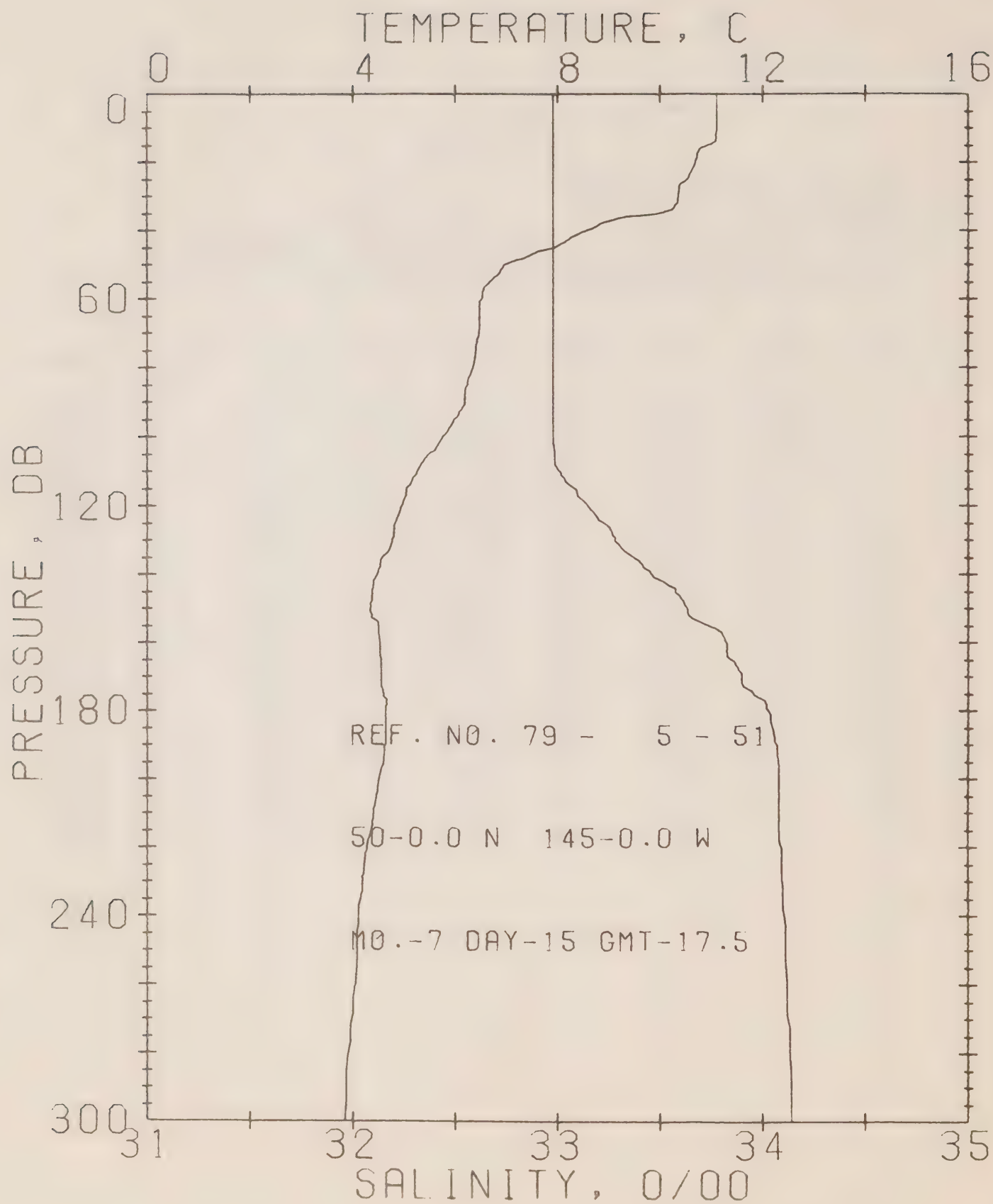
POSITION 50- .0N, 145- .0W GMT 17.5

STATION P

RESULTS OF STP CAST 307 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.08	32.99	0	25.22	275.7	.00	.00	1492.
10	11.05	32.99	10	25.23	275.4	.28	.01	1492.
20	10.78	32.99	20	25.27	271.1	.55	.06	1491.
30	10.39	32.99	30	25.34	264.9	.82	.12	1490.
50	7.60	32.99	50	25.78	223.4	1.29	.32	1480.
75	6.38	32.99	75	25.94	208.0	1.83	.66	1475.
100	5.60	33.00	99	26.05	198.3	2.33	1.11	1472.
125	4.79	33.21	124	26.30	173.8	2.80	1.65	1470.
150	4.47	33.76	149	26.77	129.4	3.18	2.17	1470.
175	4.56	34.04	174	26.99	109.7	3.47	2.65	1471.
200	4.49	34.10	199	27.04	104.7	3.74	3.17	1471.
225	4.26	34.10	223	27.07	102.2	4.00	3.72	1470.
250	4.15	34.13	248	27.10	99.3	4.25	4.33	1470.
300	3.79	34.15	298	27.15	94.5	4.73	5.69	1470.
400	3.69	34.27	397	27.26	85.5	5.64	8.93	1471.
500	3.52	34.36	496	27.35	77.6	6.46	12.64	1472.
600	3.37	34.43	595	27.41	72.0	7.20	16.84	1473.
800	3.00	34.52	793	27.52	62.4	8.54	26.30	1475.
1000	2.62	34.61	990	27.63	53.0	9.69	36.82	1477.
1200	2.36	34.66	1188	27.69	47.8	10.70	48.13	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 51

DATE 15/ 7/79

POSITION 50- .0N, 145- .0W

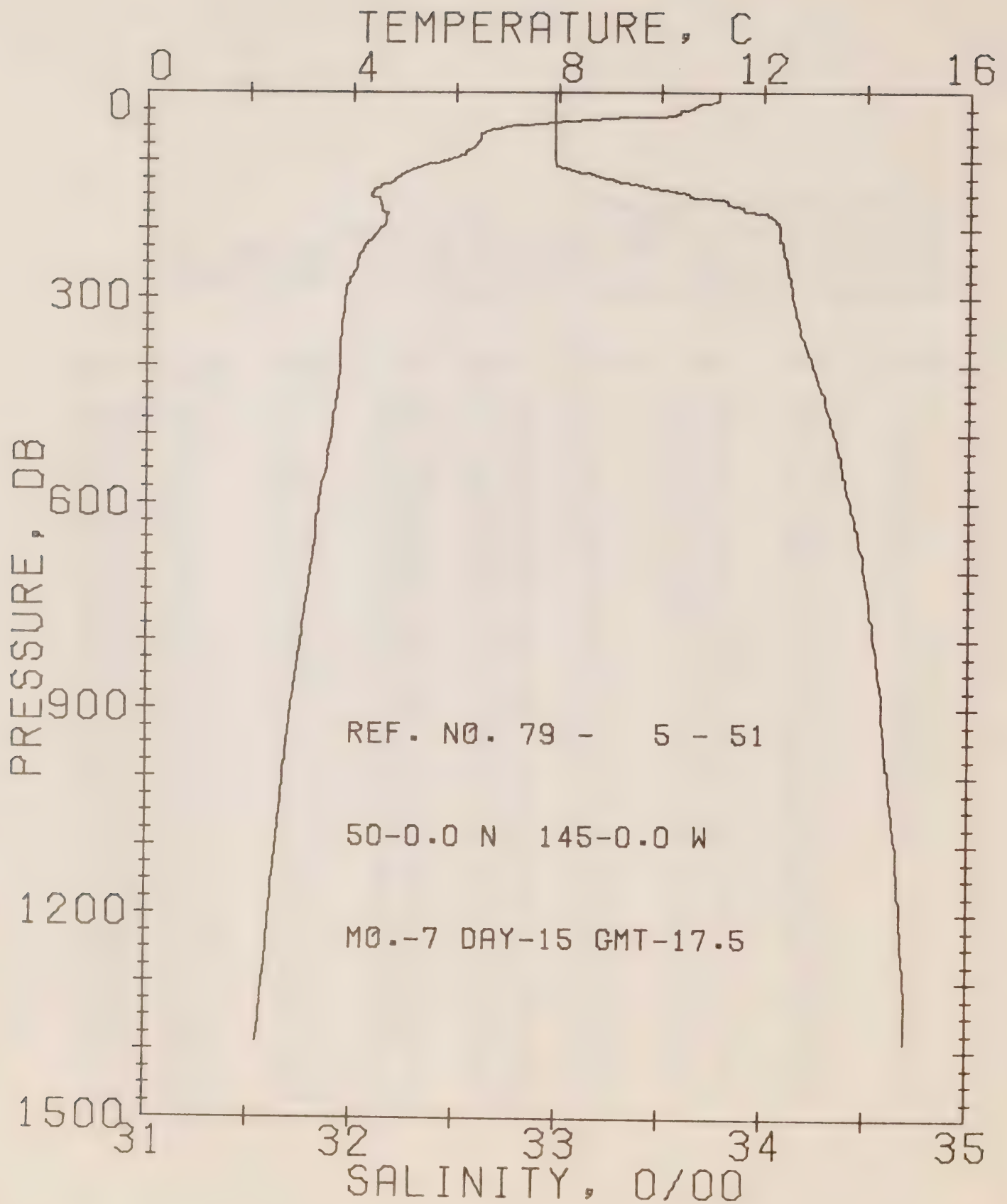
GMT 17.5

STATION P

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.11	32.98	0	25.21	277.0	.00	.00	1492.
10	11.11	32.98	10	25.21	277.2	.28	.01	1492.
20	10.68	32.98	20	25.28	270.2	.55	.06	1491.
30	10.37	32.98	30	25.34	265.2	.82	.12	1490.
40	8.56	32.98	40	25.63	237.5	1.07	.21	1483.
50	6.97	32.98	50	25.86	215.9	1.30	.32	1477.
60	6.53	32.98	60	25.91	210.4	1.51	.44	1476.
70	6.47	32.98	70	25.92	209.8	1.72	.58	1475.
80	6.36	32.98	79	25.94	208.6	1.93	.74	1475.
90	6.19	32.98	89	25.96	206.6	2.14	.92	1475.
100	5.76	32.98	99	26.01	201.6	2.34	1.11	1473.
110	5.24	33.01	109	26.10	193.6	2.54	1.33	1471.
120	4.97	33.14	119	26.23	180.5	2.73	1.54	1470.
130	4.78	33.28	129	26.36	168.5	2.90	1.77	1470.
140	4.48	33.46	139	26.54	151.9	3.06	1.99	1469.
150	4.35	33.63	149	26.68	137.9	3.21	2.20	1469.
160	4.53	33.83	159	26.82	124.9	3.34	2.41	1470.
170	4.56	33.90	169	26.88	120.1	3.46	2.61	1470.
180	4.65	34.03	179	26.97	111.5	3.58	2.82	1471.
190	4.63	34.07	189	27.00	108.3	3.69	3.03	1471.
200	4.51	34.08	199	27.02	106.4	3.79	3.24	1471.
210	4.39	34.08	208	27.04	105.3	3.90	3.46	1471.
220	4.28	34.09	218	27.06	103.4	4.00	3.69	1470.
230	4.19	34.09	228	27.07	102.2	4.11	3.93	1470.
240	4.11	34.10	238	27.09	100.7	4.21	4.17	1470.
250	4.07	34.11	248	27.09	100.0	4.31	4.42	1470.
260	4.04	34.12	258	27.11	99.0	4.41	4.68	1470.
270	3.98	34.12	268	27.11	98.2	4.51	4.95	1470.
280	3.91	34.13	278	27.13	97.1	4.60	5.22	1470.
290	3.88	34.14	288	27.14	96.1	4.70	5.50	1470.
300	3.85	34.14	298	27.14	95.9	4.80	5.79	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 51

DATE 15/ 7/79

POSITION 50- .0N, 145- .0W

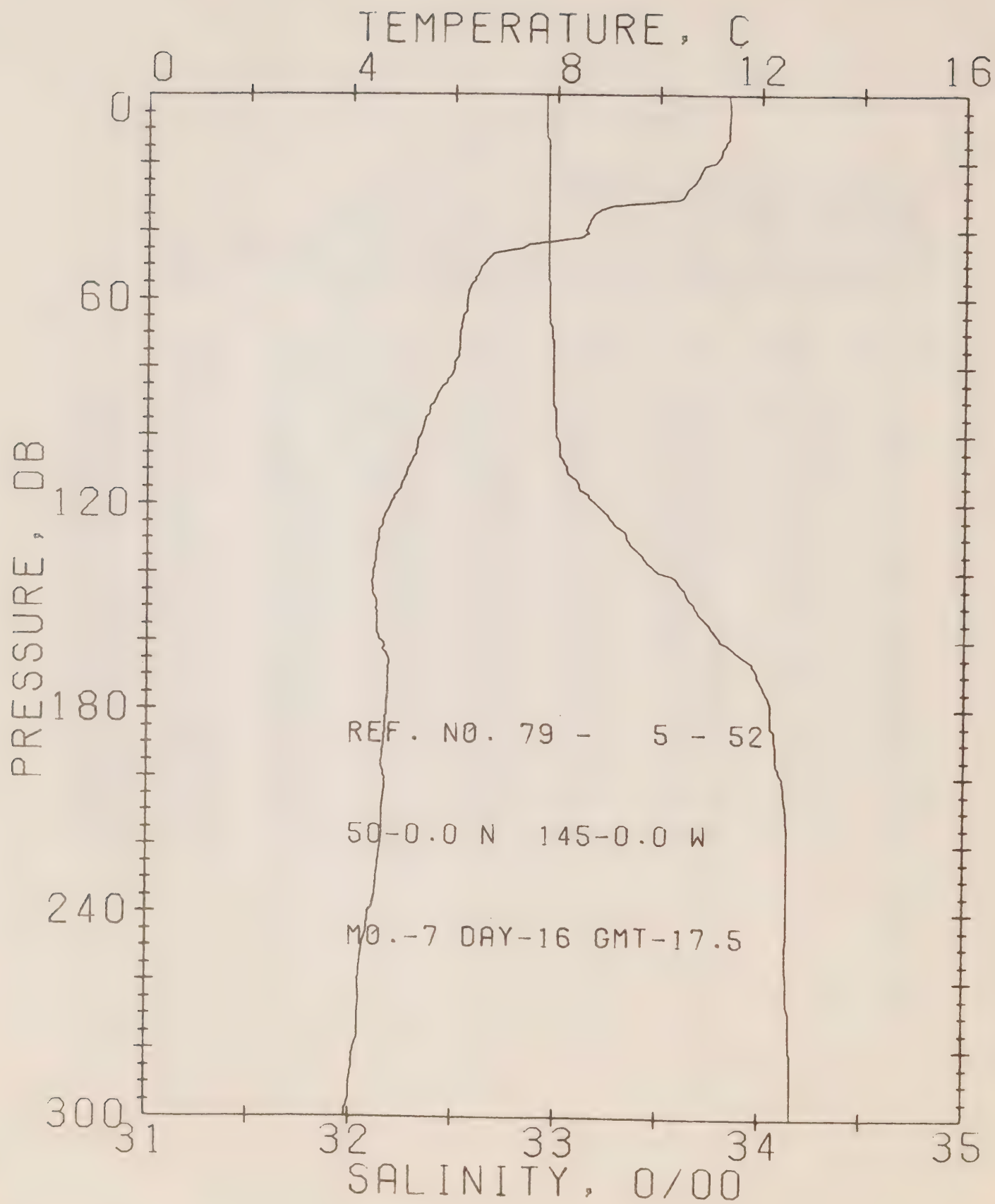
GMT 17.5

STATION P

RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.11	32.98	0	25.21	277.0	.00	.00	1492.
10	11.11	32.98	10	25.21	277.2	.28	.01	1492.
20	10.68	32.98	20	25.28	270.2	.55	.06	1491.
30	10.37	32.98	30	25.34	265.2	.82	.12	1490.
50	6.97	32.98	50	25.86	215.9	1.30	.32	1477.
75	6.40	32.98	75	25.93	209.0	1.83	.65	1475.
100	5.76	32.98	99	26.01	201.6	2.34	1.11	1473.
125	4.83	33.23	124	26.32	172.7	2.82	1.66	1470.
150	4.35	33.63	149	26.68	137.9	3.21	2.20	1469.
175	4.61	33.96	174	26.92	116.2	3.52	2.72	1471.
200	4.51	34.08	199	27.02	106.4	3.79	3.24	1471.
225	4.23	34.09	223	27.06	102.9	4.06	3.81	1470.
250	4.07	34.11	248	27.09	100.0	4.31	4.42	1470.
300	3.85	34.14	298	27.14	95.9	4.80	5.79	1470.
400	3.75	34.24	397	27.23	88.1	5.72	9.07	1471.
500	3.59	34.34	496	27.33	79.7	6.56	12.90	1472.
600	3.36	34.43	595	27.42	71.8	7.31	17.13	1473.
800	3.01	34.53	793	27.54	61.4	8.63	26.52	1475.
1000	2.66	34.61	990	27.63	53.4	9.77	36.96	1477.
1200	2.41	34.67	1188	27.70	47.4	10.78	48.21	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 52

DATE 16/ 7/79

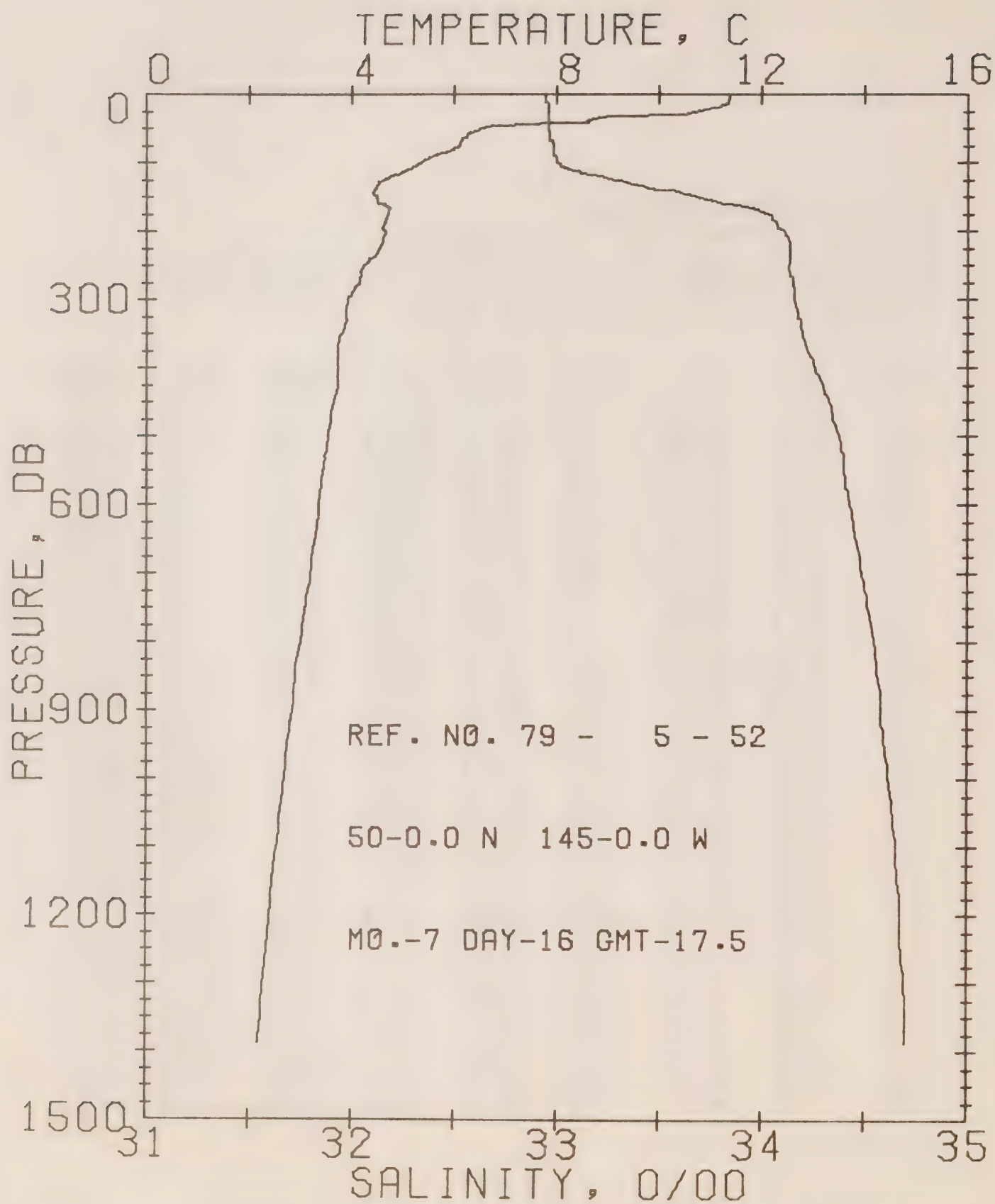
POSITION 50- .0N, 145- .0W GMT 17.5

STATION P

RESULTS OF STP CAST 208 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.37	32.95	0	25.14	283.6	.00	.00	1493.
10	11.37	32.95	10	25.14	283.9	.28	.01	1493.
20	11.09	32.96	20	25.19	278.5	.57	.06	1492.
30	10.49	32.96	30	25.30	268.7	.84	.13	1490.
40	8.56	32.96	40	25.61	239.0	1.08	.21	1483.
50	6.57	32.96	50	25.89	212.3	1.31	.32	1475.
60	6.25	32.97	60	25.94	207.8	1.52	.43	1474.
70	6.10	32.98	70	25.97	205.3	1.73	.57	1474.
80	6.01	32.99	79	25.99	203.6	1.93	.73	1474.
90	5.63	32.99	89	26.03	199.3	2.13	.90	1472.
100	5.36	33.00	99	26.07	195.5	2.33	1.09	1471.
110	5.10	33.05	109	26.14	189.0	2.52	1.30	1471.
120	4.78	33.20	119	26.30	174.4	2.70	1.51	1470.
130	4.53	33.35	129	26.44	160.6	2.87	1.73	1469.
140	4.44	33.50	139	26.57	148.5	3.02	1.94	1469.
150	4.50	33.68	149	26.71	135.8	3.16	2.14	1470.
160	4.55	33.81	159	26.81	126.6	3.30	2.35	1470.
170	4.73	33.99	169	26.93	115.2	3.42	2.55	1471.
180	4.69	34.05	179	26.98	110.4	3.53	2.75	1471.
190	4.63	34.07	189	27.01	108.0	3.64	2.96	1471.
200	4.64	34.11	199	27.03	105.6	3.74	3.17	1472.
210	4.62	34.13	208	27.05	103.9	3.85	3.39	1472.
220	4.58	34.14	218	27.06	102.9	3.95	3.62	1472.
230	4.51	34.14	228	27.07	102.2	4.05	3.85	1472.
240	4.35	34.14	238	27.09	100.6	4.16	4.10	1471.
250	4.25	34.13	248	27.09	100.3	4.26	4.35	1471.
260	4.15	34.14	258	27.11	98.6	4.36	4.61	1471.
270	4.16	34.15	268	27.12	98.1	4.46	4.87	1471.
280	4.08	34.15	278	27.12	97.3	4.55	5.15	1471.
290	4.01	34.16	288	27.14	95.9	4.65	5.43	1471.
300	3.91	34.16	298	27.15	95.0	4.75	5.72	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 52

DATE 16/ 7/79

POSITION 50- .0N, 145- .0W

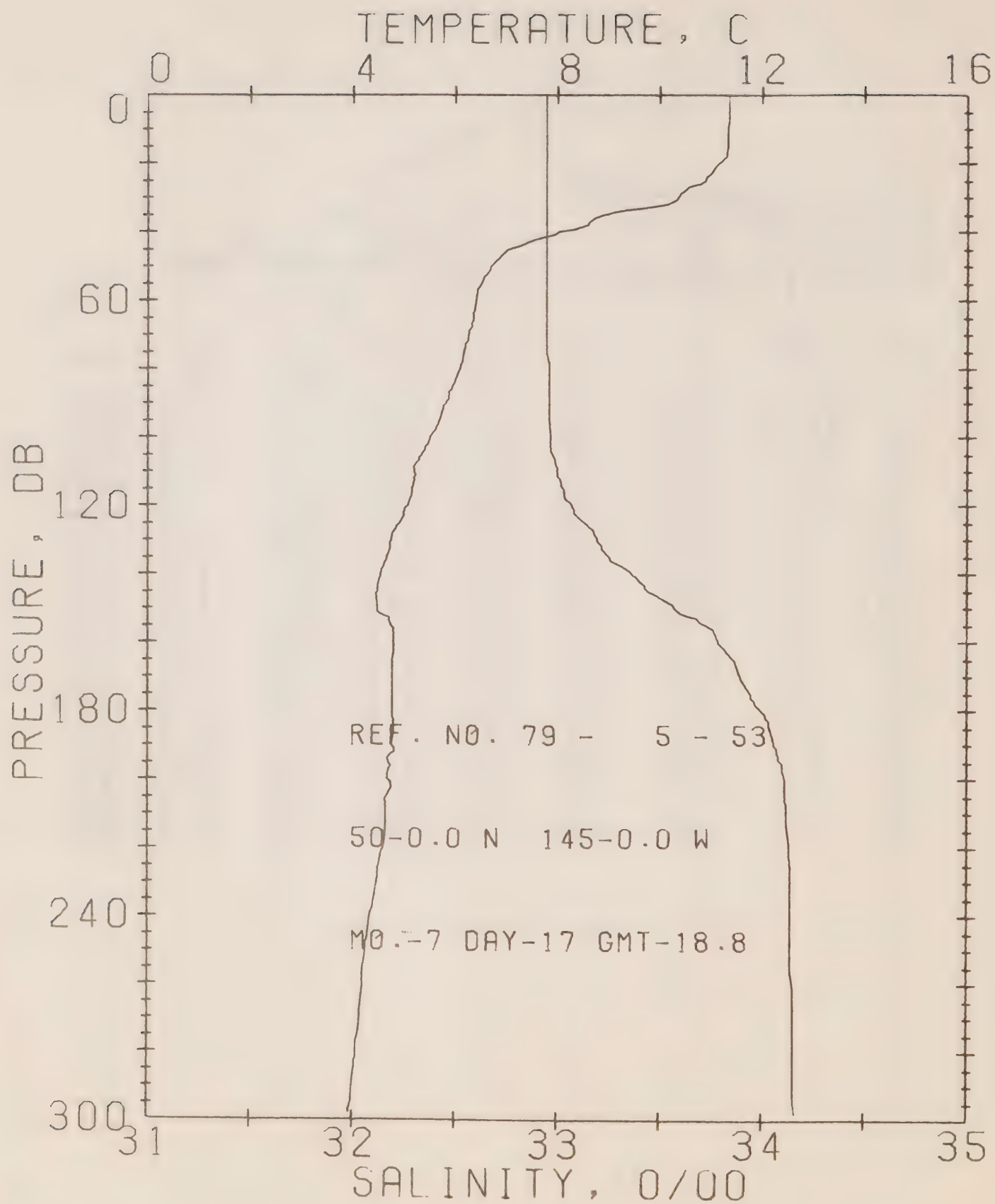
GMT 17.5

STATION P

RESULTS OF STP CAST 325 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.37	32.95	0	25.14	283.6	.00	.00	1493.
10	11.37	32.95	10	25.14	283.9	.28	.01	1493.
20	11.09	32.96	20	25.19	278.5	.57	.06	1492.
30	10.49	32.96	30	25.30	268.7	.84	.13	1490.
50	6.57	32.96	50	25.89	212.3	1.31	.32	1475.
75	6.10	32.99	75	25.98	204.6	1.83	.65	1474.
100	5.36	33.00	99	26.07	195.5	2.33	1.09	1471.
125	4.61	33.28	124	26.38	166.7	2.79	1.62	1469.
150	4.50	33.68	149	26.71	135.8	3.16	2.14	1470.
175	4.72	34.03	174	26.96	112.1	3.47	2.65	1471.
200	4.64	34.11	199	27.03	105.6	3.74	3.17	1472.
225	4.55	34.14	223	27.07	102.5	4.00	3.73	1472.
250	4.25	34.13	248	27.09	100.3	4.26	4.35	1471.
300	3.91	34.16	298	27.15	95.0	4.75	5.72	1470.
400	3.74	34.26	397	27.24	86.8	5.66	8.96	1471.
500	3.54	34.38	496	27.36	76.5	6.47	12.68	1472.
600	3.37	34.43	595	27.42	71.6	7.21	16.83	1473.
800	3.01	34.55	793	27.54	60.6	8.53	26.23	1475.
1000	2.69	34.61	990	27.63	53.4	9.67	36.63	1477.
1200	2.40	34.67	1188	27.70	47.3	10.67	47.78	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 53

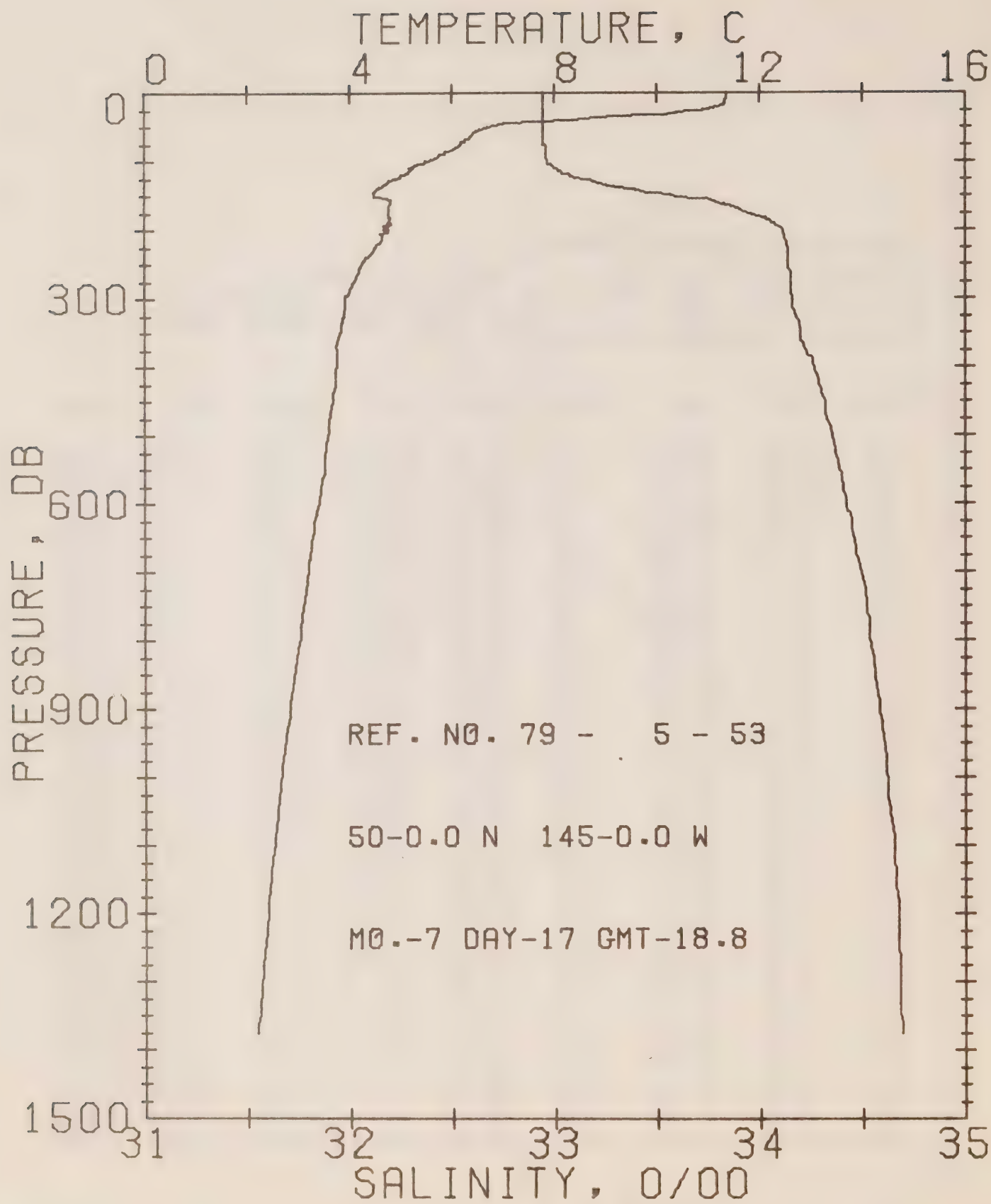
DATE 17/ 7/79

POSITION 50- .0N, 145- .0W GMT 18.8 STATION P

RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.35	32.95	0	25.14	283.3	.00	.00	1493.
10	11.34	32.95	10	25.14	283.3	.28	.01	1493.
20	11.18	32.95	20	25.17	280.7	.57	.06	1492.
30	10.35	32.95	30	25.32	267.2	.84	.13	1490.
40	8.01	32.95	40	25.69	231.9	1.09	.22	1481.
50	6.69	32.95	50	25.87	214.6	1.31	.32	1476.
60	6.40	32.95	60	25.91	211.1	1.52	.44	1475.
70	6.25	32.95	70	25.93	209.4	1.73	.58	1475.
80	6.09	32.96	79	25.95	206.8	1.94	.73	1474.
90	5.82	32.96	89	25.99	203.7	2.15	.91	1473.
100	5.50	32.97	99	26.03	199.4	2.35	1.11	1472.
110	5.20	33.00	109	26.09	193.9	2.55	1.32	1471.
120	5.08	33.07	119	26.16	187.4	2.74	1.54	1471.
130	4.75	33.19	129	26.29	174.9	2.92	1.77	1470.
140	4.54	33.37	139	26.46	159.3	3.09	2.00	1469.
150	4.47	33.57	149	26.62	143.7	3.24	2.23	1469.
160	4.81	33.79	159	26.76	131.0	3.37	2.44	1471.
170	4.77	33.89	169	26.85	122.8	3.50	2.65	1471.
180	4.77	34.00	179	26.93	115.1	3.62	2.87	1472.
190	4.75	34.06	189	26.98	110.4	3.73	3.08	1472.
200	4.68	34.11	199	27.03	106.0	3.84	3.29	1472.
210	4.63	34.12	209	27.04	104.8	3.95	3.52	1472.
220	4.58	34.13	218	27.06	103.6	4.05	3.74	1472.
230	4.46	34.14	228	27.08	101.7	4.15	3.98	1471.
240	4.33	34.14	238	27.09	100.4	4.25	4.22	1471.
250	4.24	34.14	248	27.10	99.5	4.35	4.47	1471.
260	4.18	34.15	258	27.11	98.4	4.45	4.73	1471.
270	4.12	34.15	268	27.12	97.7	4.55	4.99	1471.
280	4.05	34.15	278	27.13	97.0	4.65	5.27	1470.
290	3.99	34.15	288	27.13	96.4	4.74	5.55	1470.
300	3.92	34.16	298	27.15	95.1	4.84	5.83	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 53

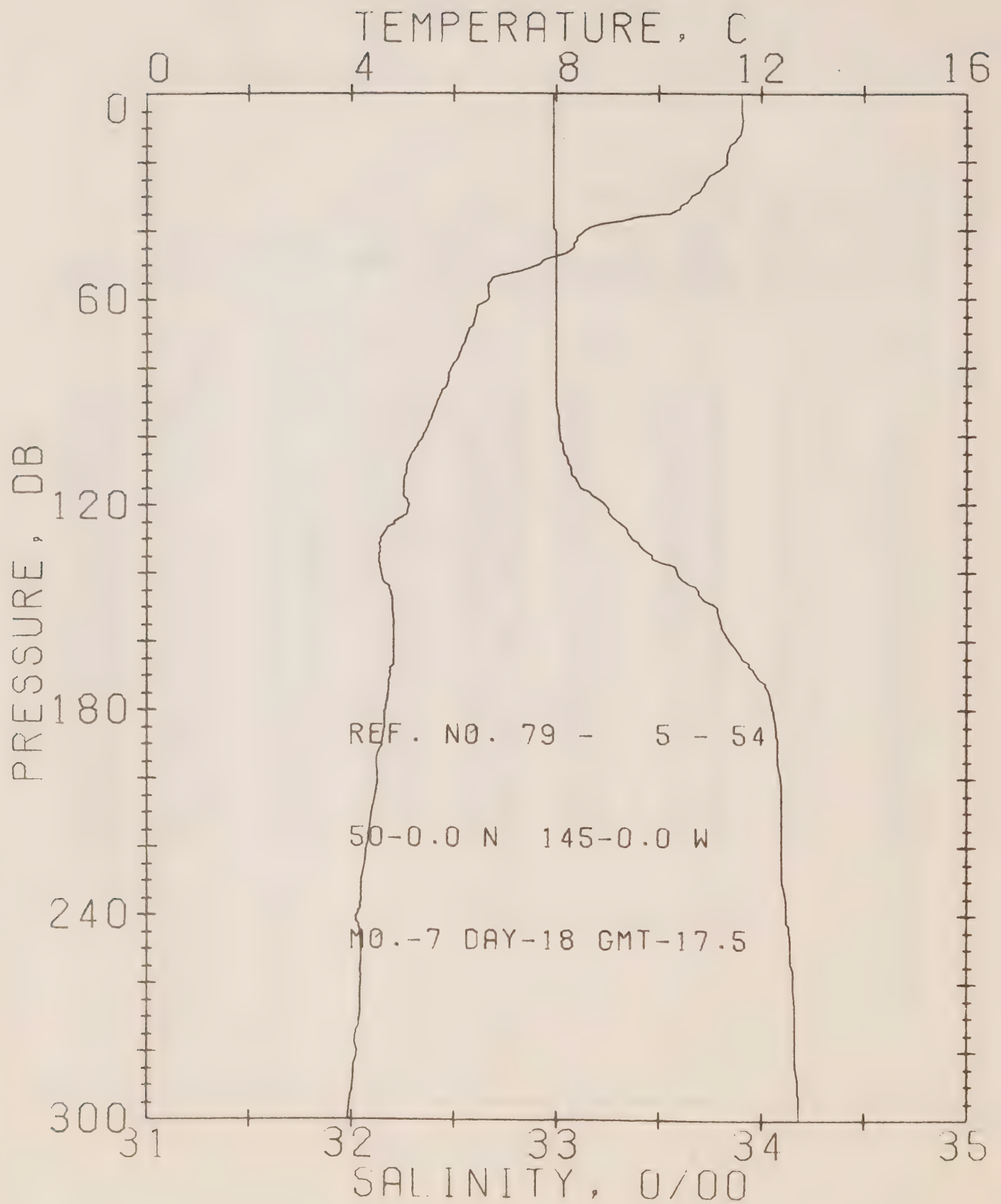
DATE 17/ 7/79

POSITION 50- .0N, 145- .0W GMT 18.8 STATION P

RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.35	32.95	0	25.14	283.3	.00	.00	1493.
10	11.34	32.95	10	25.14	283.3	.28	.01	1493.
20	11.18	32.95	20	25.17	280.7	.57	.06	1492.
30	10.35	32.95	30	25.32	267.2	.84	.13	1490.
50	6.69	32.95	50	25.87	214.6	1.31	.32	1476.
75	6.17	32.95	75	25.94	208.5	1.84	.65	1474.
100	5.50	32.97	99	26.03	199.4	2.35	1.11	1472.
125	4.90	33.14	124	26.24	180.2	2.83	1.66	1470.
150	4.47	33.57	149	26.62	143.7	3.24	2.23	1469.
175	4.77	33.95	174	26.89	118.7	3.56	2.76	1472.
200	4.68	34.11	199	27.03	106.0	3.84	3.29	1472.
225	4.52	34.14	223	27.07	102.3	4.10	3.86	1472.
250	4.24	34.14	248	27.10	99.5	4.35	4.47	1471.
300	3.92	34.16	298	27.15	95.1	4.84	5.83	1470.
400	3.75	34.27	397	27.25	85.9	5.75	9.09	1471.
500	3.58	34.35	496	27.34	78.7	6.58	12.86	1472.
600	3.40	34.42	595	27.41	72.7	7.33	17.09	1473.
800	3.01	34.53	793	27.53	61.5	8.66	26.48	1475.
1000	2.64	34.62	990	27.63	52.8	9.79	36.88	1477.
1200	2.39	34.67	1188	27.70	47.1	10.79	48.01	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 54

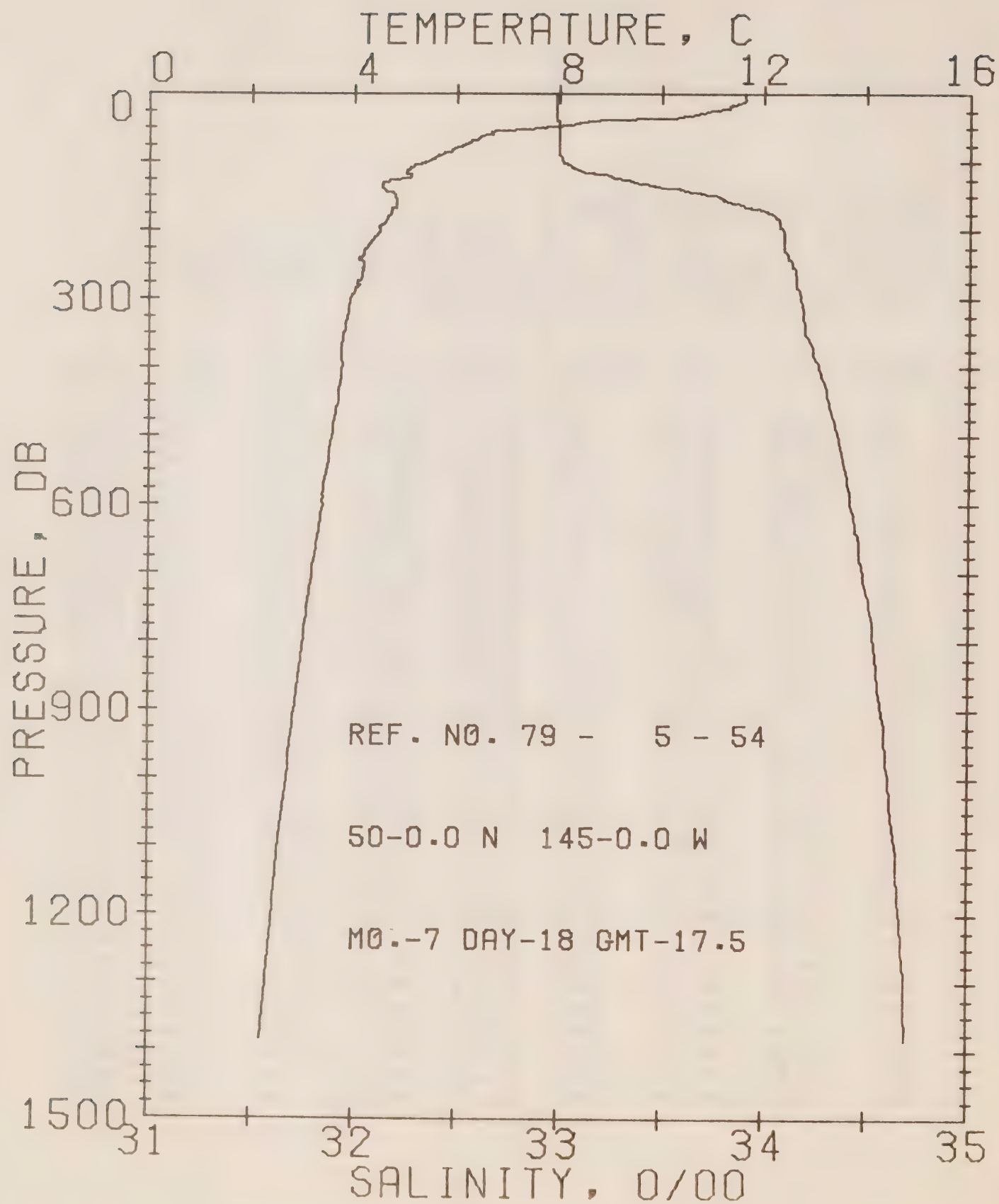
DATE 18/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.62	32.99	0	25.12	285.0	.00	.00	1494.
10	11.62	32.99	10	25.12	285.3	.29	.01	1494.
20	11.33	32.99	20	25.18	280.4	.57	.06	1493.
30	10.65	32.99	30	25.30	269.1	.84	.13	1491.
40	8.56	33.00	40	25.64	236.0	1.10	.22	1483.
50	7.68	33.00	50	25.77	223.8	1.33	.32	1480.
60	6.69	33.00	60	25.91	211.0	1.54	.44	1476.
70	6.26	33.00	70	25.97	205.8	1.75	.58	1475.
80	5.95	33.00	79	26.00	202.1	1.96	.74	1474.
90	5.68	33.00	89	26.04	199.1	2.16	.91	1473.
100	5.39	33.02	99	26.09	194.4	2.35	1.10	1472.
110	5.07	33.07	109	26.16	187.2	2.54	1.31	1471.
120	5.12	33.24	119	26.29	175.1	2.73	1.52	1471.
130	4.57	33.37	129	26.46	159.5	2.89	1.73	1469.
140	4.57	33.59	139	26.63	143.4	3.05	1.94	1470.
150	4.80	33.79	149	26.76	130.7	3.18	2.15	1471.
160	4.83	33.85	159	26.81	126.7	3.31	2.35	1471.
170	4.75	33.98	169	26.92	116.2	3.43	2.55	1471.
180	4.66	34.06	179	26.99	109.3	3.55	2.75	1471.
190	4.59	34.08	189	27.01	107.2	3.65	2.96	1471.
200	4.50	34.09	199	27.04	105.3	3.76	3.17	1471.
210	4.40	34.10	208	27.05	103.8	3.87	3.39	1471.
220	4.30	34.10	218	27.06	102.9	3.97	3.61	1470.
230	4.20	34.10	228	27.07	101.9	4.07	3.85	1470.
240	4.11	34.12	238	27.10	99.5	4.17	4.09	1470.
250	4.19	34.14	248	27.11	99.0	4.27	4.34	1471.
260	4.17	34.15	258	27.12	98.1	4.37	4.59	1471.
270	4.14	34.16	268	27.13	97.1	4.47	4.86	1471.
280	4.11	34.16	278	27.13	96.9	4.56	5.13	1471.
290	4.02	34.17	288	27.15	95.3	4.66	5.41	1471.
300	3.91	34.18	298	27.17	93.5	4.75	5.69	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 54

DATE 18/ 7/79

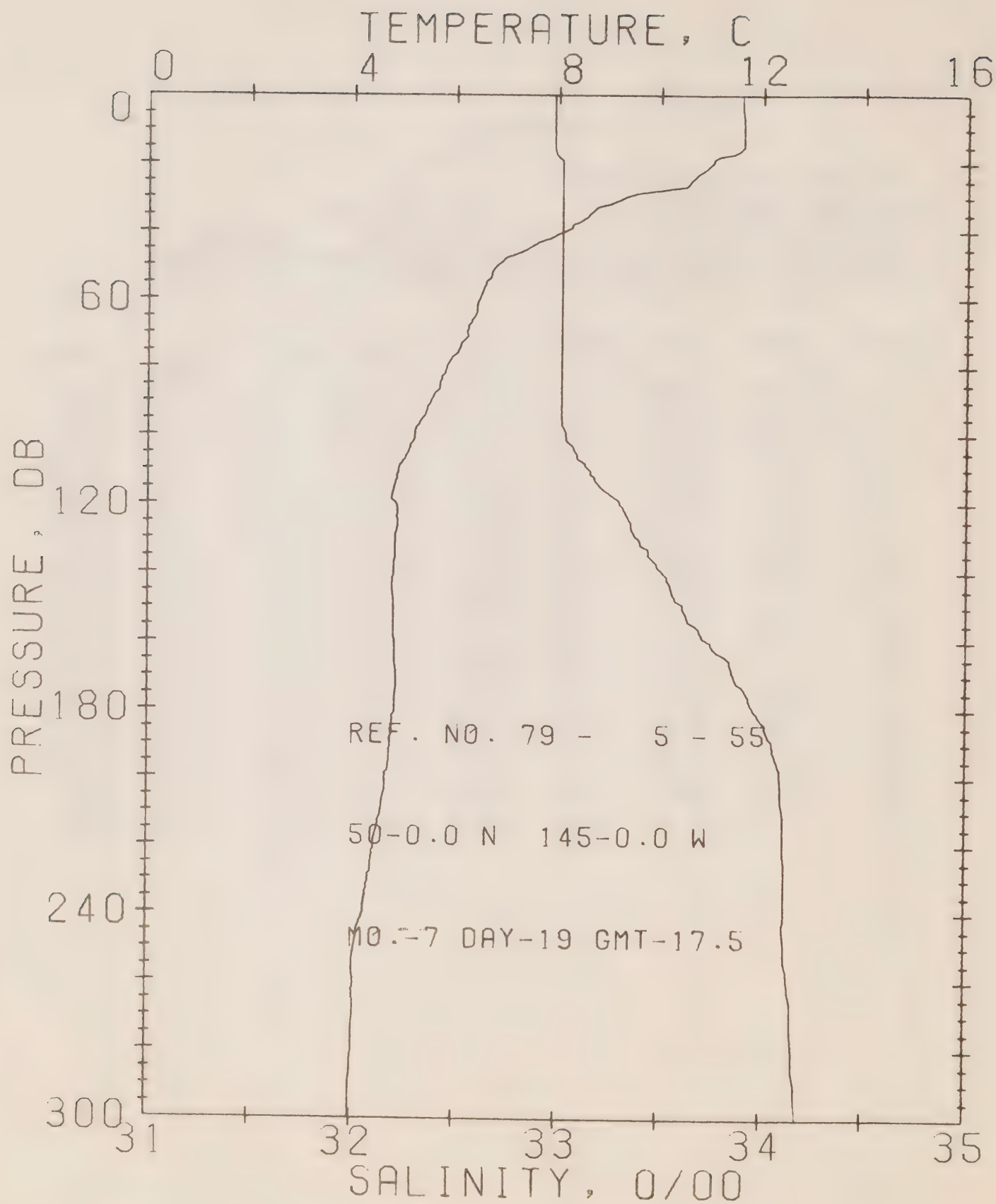
POSITION 50- .0N, 145- .0W GMT 17.5

STATION P

RESULTS OF STP CAST 295 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

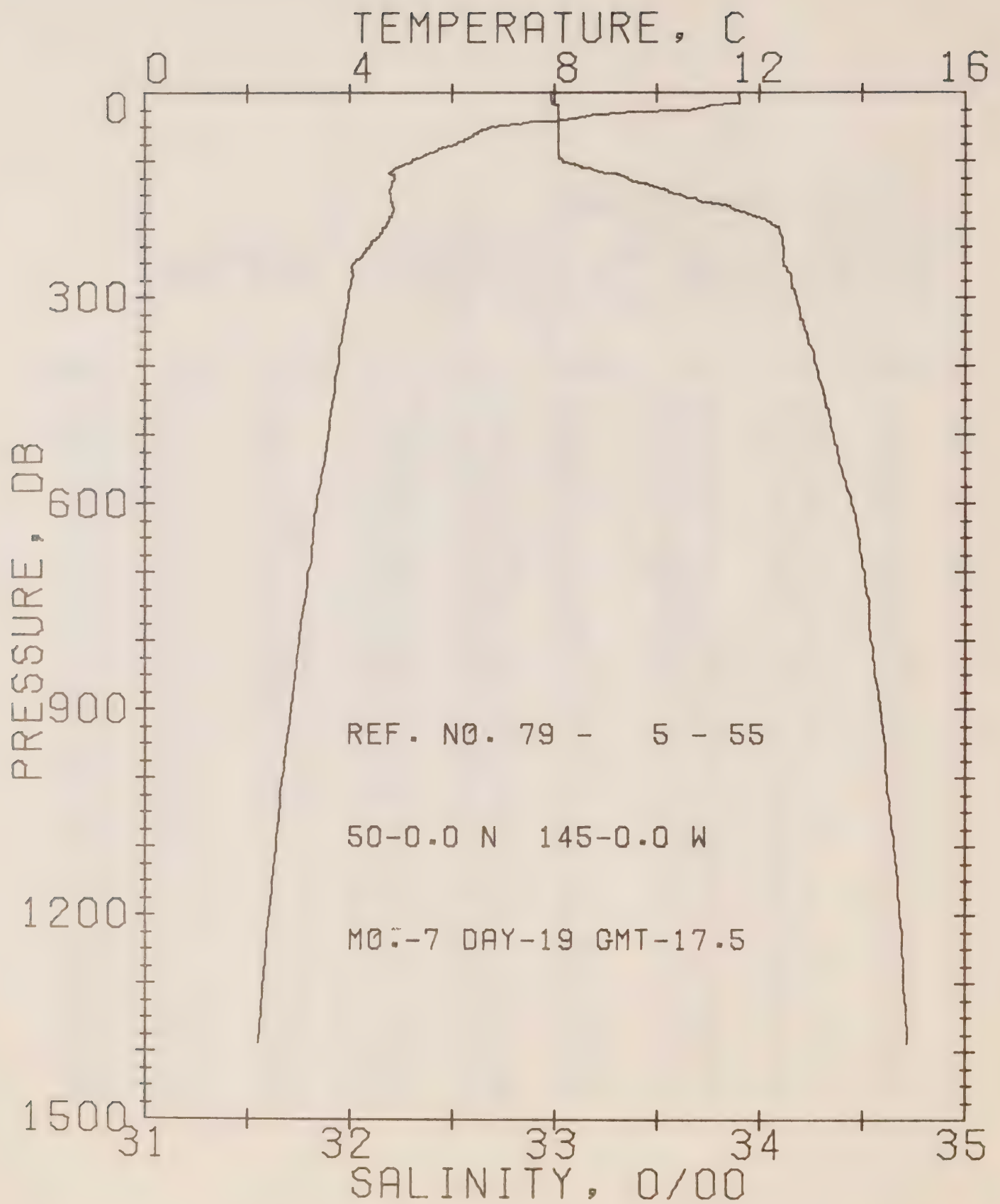
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.62	32.99	0	25.12	285.0	.00	.00	1494.
10	11.62	32.99	10	25.12	285.3	.29	.01	1494.
20	11.33	32.99	20	25.18	280.4	.57	.06	1493.
30	10.65	32.99	30	25.30	269.1	.84	.13	1491.
50	7.68	33.00	50	25.77	223.8	1.33	.32	1480.
75	6.14	33.00	75	25.98	204.3	1.85	.66	1474.
100	5.39	33.02	99	26.09	194.4	2.35	1.10	1472.
125	4.84	33.31	124	26.38	166.9	2.81	1.63	1470.
150	4.80	33.79	149	26.76	130.7	3.18	2.15	1471.
175	4.71	34.04	174	26.97	111.3	3.49	2.65	1471.
200	4.50	34.09	199	27.04	105.3	3.76	3.17	1471.
225	4.26	34.10	223	27.07	102.4	4.02	3.73	1470.
250	4.19	34.14	248	27.11	99.0	4.27	4.34	1471.
300	3.91	34.18	298	27.17	93.5	4.75	5.69	1470.
400	3.77	34.27	397	27.25	86.2	5.66	8.91	1471.
500	3.58	34.36	496	27.35	77.9	6.48	12.66	1472.
600	3.40	34.42	595	27.41	72.5	7.22	16.84	1473.
800	3.02	34.54	793	27.54	61.5	8.55	26.28	1475.
1000	2.70	34.61	990	27.62	53.8	9.70	36.80	1477.
1200	2.43	34.67	1188	27.69	47.8	10.71	48.12	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 55 DATE 19/ 7/79
 POSITION 50- .0N, 145- .0W GMT 17.5 STATION P
 RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.60	32.98	0	25.12	285.4	.00	.00	1494.
10	11.62	32.98	10	25.11	286.0	.29	.01	1494.
20	11.00	33.02	20	25.26	272.6	.57	.06	1492.
30	9.29	33.02	30	25.55	245.3	.83	.12	1486.
40	8.12	33.02	40	25.73	228.3	1.07	.21	1481.
50	6.79	33.02	50	25.91	210.6	1.29	.31	1476.
60	6.46	33.02	60	25.96	206.5	1.49	.43	1475.
70	6.22	33.02	70	25.99	203.8	1.70	.56	1474.
80	5.82	33.02	79	26.04	199.1	1.90	.72	1473.
90	5.53	33.02	89	26.07	195.8	2.10	.89	1472.
100	5.20	33.04	99	26.12	190.8	2.29	1.07	1471.
110	4.89	33.16	109	26.25	178.5	2.48	1.27	1470.
120	4.85	33.31	119	26.38	166.9	2.65	1.48	1470.
130	4.83	33.40	129	26.45	160.1	2.82	1.68	1470.
140	4.79	33.52	139	26.55	150.7	2.97	1.90	1470.
150	4.79	33.61	149	26.62	144.1	3.12	2.12	1471.
160	4.82	33.75	159	26.73	134.1	3.26	2.34	1471.
170	4.85	33.87	169	26.82	125.8	3.39	2.55	1472.
180	4.82	33.97	179	26.90	117.8	3.51	2.77	1472.
190	4.75	34.05	189	26.98	110.7	3.62	2.99	1472.
200	4.64	34.09	199	27.02	106.9	3.73	3.20	1472.
210	4.57	34.11	208	27.04	105.1	3.84	3.42	1471.
220	4.43	34.11	218	27.06	103.5	3.94	3.65	1471.
230	4.32	34.12	228	27.08	101.7	4.04	3.89	1471.
240	4.24	34.12	238	27.08	100.9	4.15	4.13	1471.
250	4.06	34.12	248	27.10	99.1	4.25	4.38	1470.
260	4.05	34.13	258	27.12	98.0	4.34	4.63	1470.
270	4.04	34.15	268	27.13	96.8	4.44	4.90	1470.
280	4.03	34.16	278	27.14	96.2	4.54	5.17	1470.
290	3.98	34.17	288	27.15	94.9	4.63	5.45	1470.
300	3.97	34.18	298	27.16	94.1	4.73	5.73	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 55

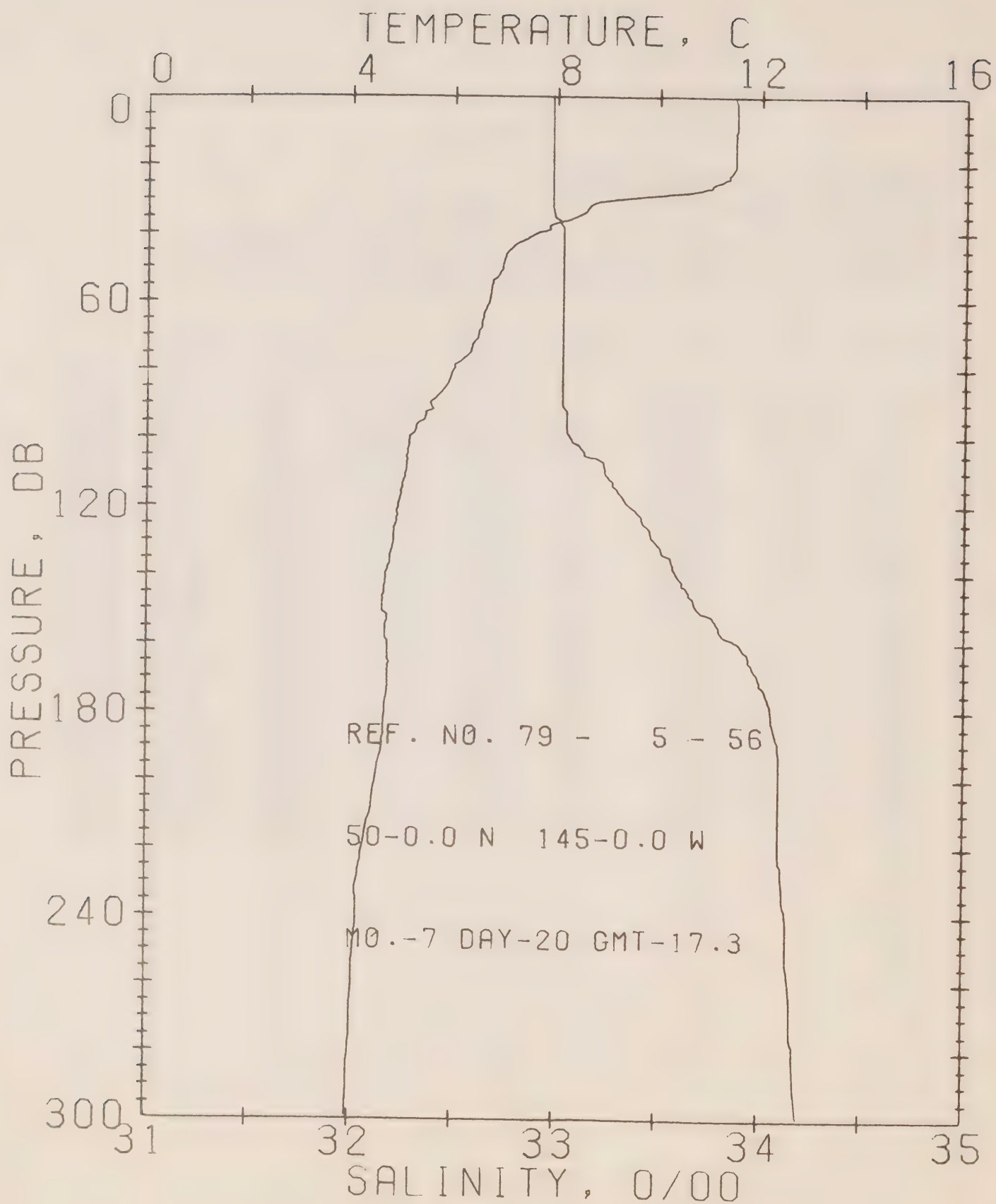
DATE 19/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 294 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.60	32.98	0	25.12	285.4	.00	.00	1494.
10	11.62	32.98	10	25.11	286.0	.29	.01	1494.
20	11.00	33.02	20	25.26	272.6	.57	.06	1492.
30	9.29	33.02	30	25.55	245.3	.83	.12	1486.
50	6.79	33.02	50	25.91	210.6	1.29	.31	1476.
75	6.05	33.02	75	26.01	201.8	1.80	.64	1474.
100	5.20	33.04	99	26.12	190.8	2.29	1.07	1471.
125	4.89	33.36	124	26.41	163.7	2.73	1.58	1470.
150	4.79	33.61	149	26.62	144.1	3.12	2.12	1471.
175	4.84	33.93	174	26.87	120.9	3.45	2.66	1472.
200	4.64	34.09	199	27.02	106.9	3.73	3.20	1472.
225	4.37	34.12	223	27.07	102.1	3.99	3.77	1471.
250	4.06	34.12	248	27.10	99.1	4.25	4.38	1470.
300	3.97	34.18	298	27.16	94.1	4.73	5.73	1471.
400	3.76	34.28	397	27.26	85.4	5.63	8.93	1471.
500	3.57	34.36	496	27.34	78.1	6.44	12.67	1472.
600	3.36	34.45	595	27.44	69.9	7.19	16.82	1473.
800	3.02	34.54	793	27.54	61.1	8.48	26.06	1475.
1000	2.69	34.62	990	27.63	53.1	9.62	36.45	1477.
1200	2.41	34.68	1188	27.70	46.6	10.62	47.60	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 56

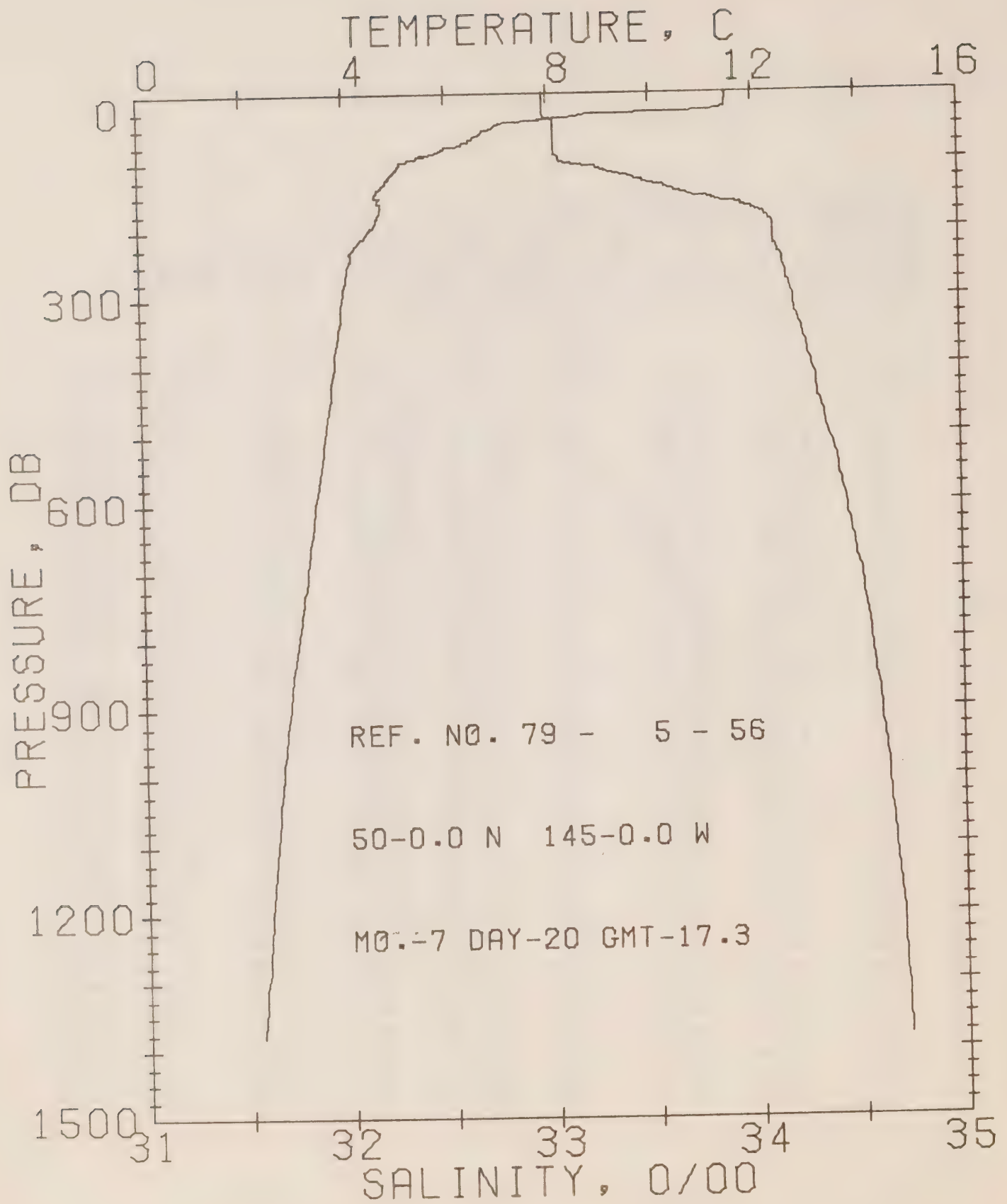
DATE 20/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.50	32.98	0	25.14	283.7	.00	.00	1493.
10	11.52	32.98	10	25.13	284.2	.28	.01	1493.
20	11.50	32.98	20	25.14	284.0	.57	.06	1493.
30	9.40	32.98	30	25.50	250.0	.84	.13	1486.
40	7.60	33.03	40	25.81	220.3	1.08	.21	1479.
50	6.94	33.03	50	25.90	211.8	1.29	.31	1477.
60	6.68	33.03	60	25.94	208.5	1.50	.43	1476.
70	6.47	33.03	70	25.96	206.1	1.71	.56	1475.
80	6.00	33.03	79	26.02	200.5	1.91	.72	1474.
90	5.53	33.03	89	26.08	195.1	2.11	.89	1472.
100	5.12	33.07	99	26.16	187.6	2.30	1.08	1471.
110	5.07	33.24	109	26.30	174.5	2.48	1.27	1471.
120	4.92	33.36	119	26.41	163.9	2.65	1.47	1470.
130	4.82	33.48	129	26.52	153.6	2.81	1.67	1470.
140	4.66	33.59	139	26.62	144.1	2.96	1.87	1470.
150	4.61	33.69	149	26.71	135.7	3.10	2.08	1470.
160	4.73	33.90	159	26.86	121.8	3.23	2.28	1471.
170	4.73	33.99	169	26.93	114.8	3.35	2.48	1471.
180	4.67	34.06	179	26.99	109.6	3.46	2.68	1471.
190	4.61	34.09	189	27.02	106.6	3.57	2.89	1471.
200	4.50	34.10	199	27.04	104.7	3.67	3.10	1471.
210	4.40	34.10	208	27.05	103.8	3.78	3.31	1471.
220	4.25	34.10	218	27.07	102.3	3.88	3.54	1470.
230	4.13	34.11	228	27.09	100.2	3.98	3.77	1470.
240	4.13	34.13	238	27.11	98.7	4.08	4.01	1470.
250	4.07	34.14	248	27.12	97.7	4.18	4.26	1470.
260	4.05	34.15	258	27.13	96.8	4.27	4.51	1470.
270	4.02	34.16	268	27.14	95.9	4.37	4.77	1470.
280	3.99	34.17	278	27.15	94.9	4.47	5.04	1470.
290	3.98	34.18	288	27.16	94.1	4.56	5.31	1470.
300	3.95	34.19	298	27.17	93.1	4.65	5.59	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 56

DATE 20/ 7/79

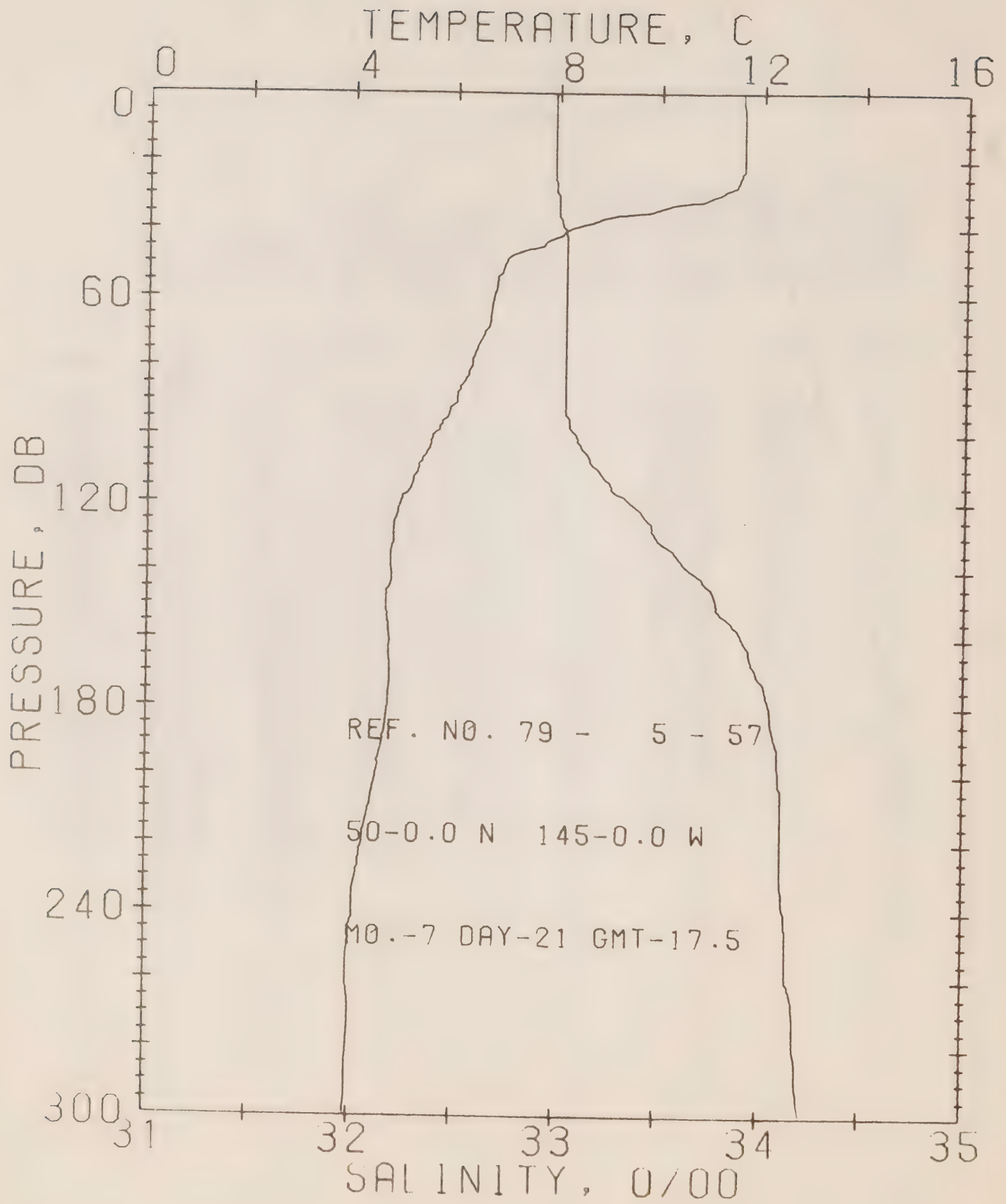
POSITION 50- .0N, 145- .0W GMT 17.3

STATION P

RESULTS OF STP CAST : 298 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.50	32.98	0	25.14	283.7	.00	.00	1493.
10	11.52	32.98	10	25.13	284.2	.28	.01	1493.
20	11.50	32.98	20	25.14	284.0	.57	.06	1493.
30	9.40	32.98	30	25.50	250.0	.84	.13	1486.
50	6.94	33.03	50	25.90	211.8	1.29	.31	1477.
75	6.32	33.03	75	25.98	204.3	1.81	.64	1475.
100	5.12	33.07	99	26.16	187.6	2.30	1.08	1471.
125	4.87	33.43	124	26.47	158.2	2.73	1.57	1470.
150	4.61	33.69	149	26.71	135.7	3.10	2.08	1470.
175	4.70	34.03	174	26.97	111.7	3.40	2.58	1471.
200	4.50	34.10	199	27.04	104.7	3.67	3.10	1471.
225	4.19	34.11	223	27.08	101.0	3.93	3.66	1470.
250	4.07	34.14	248	27.12	97.7	4.18	4.26	1470.
300	3.95	34.19	298	27.17	93.1	4.65	5.59	1470.
400	3.78	34.28	397	27.26	85.5	5.55	8.78	1471.
500	3.58	34.36	496	27.34	78.5	6.37	12.53	1472.
600	3.37	34.44	595	27.43	70.6	7.11	16.69	1473.
800	2.99	34.55	793	27.55	59.9	8.41	25.93	1475.
1000	2.65	34.63	990	27.64	51.7	9.52	36.08	1477.
1200	2.40	34.69	1188	27.71	45.8	10.50	47.01	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 57

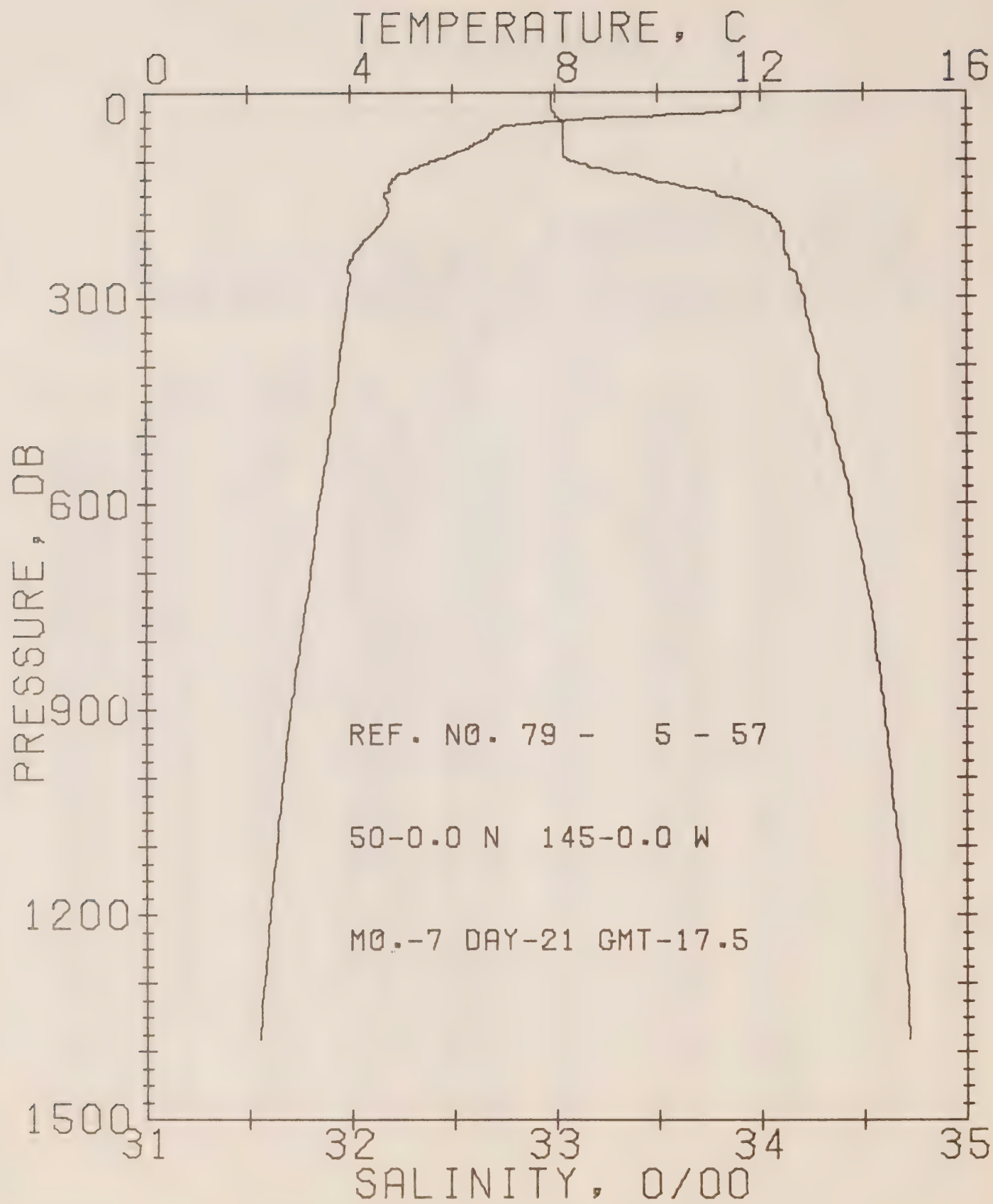
DATE 21/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 190 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.60	32.98	0	25.12	285.4	.00	.00	1494.
10	11.62	32.98	10	25.11	286.0	.29	.01	1494.
20	11.62	32.98	20	25.11	286.2	.57	.06	1494.
30	11.17	33.00	30	25.21	277.2	.86	.13	1493.
40	8.21	33.03	40	25.72	228.8	1.11	.22	1482.
50	6.95	33.04	50	25.91	211.2	1.33	.32	1477.
60	6.73	33.04	60	25.94	208.5	1.54	.44	1476.
70	6.57	33.04	70	25.96	206.6	1.75	.58	1476.
80	6.31	33.04	79	25.99	203.5	1.95	.73	1475.
90	6.02	33.04	89	26.03	200.1	2.15	.91	1474.
100	5.55	33.09	99	26.12	191.0	2.35	1.10	1472.
110	5.29	33.20	109	26.24	179.9	2.53	1.30	1472.
120	4.93	33.36	119	26.41	164.0	2.71	1.50	1470.
130	4.80	33.49	129	26.52	153.0	2.86	1.70	1470.
140	4.76	33.65	139	26.66	140.3	3.01	1.90	1471.
150	4.66	33.79	149	26.78	129.2	3.14	2.10	1470.
160	4.74	33.91	159	26.87	120.9	3.27	2.30	1471.
170	4.74	33.98	169	26.92	115.7	3.39	2.49	1471.
180	4.71	34.05	179	26.98	110.6	3.50	2.69	1471.
190	4.61	34.08	189	27.01	107.4	3.61	2.90	1471.
200	4.49	34.10	199	27.04	104.7	3.72	3.11	1471.
210	4.34	34.11	208	27.07	102.4	3.82	3.33	1471.
220	4.23	34.11	218	27.08	101.4	3.92	3.55	1470.
230	4.11	34.11	228	27.09	100.2	4.02	3.78	1470.
240	4.05	34.13	238	27.11	98.2	4.12	4.02	1470.
250	3.97	34.14	248	27.13	96.7	4.22	4.26	1470.
260	3.95	34.14	258	27.13	96.6	4.31	4.51	1470.
270	4.00	34.18	268	27.15	94.4	4.41	4.77	1470.
280	3.98	34.18	278	27.16	94.1	4.50	5.03	1470.
290	3.96	34.19	288	27.17	93.2	4.60	5.31	1470.
300	3.92	34.21	298	27.19	91.3	4.69	5.58	1470.



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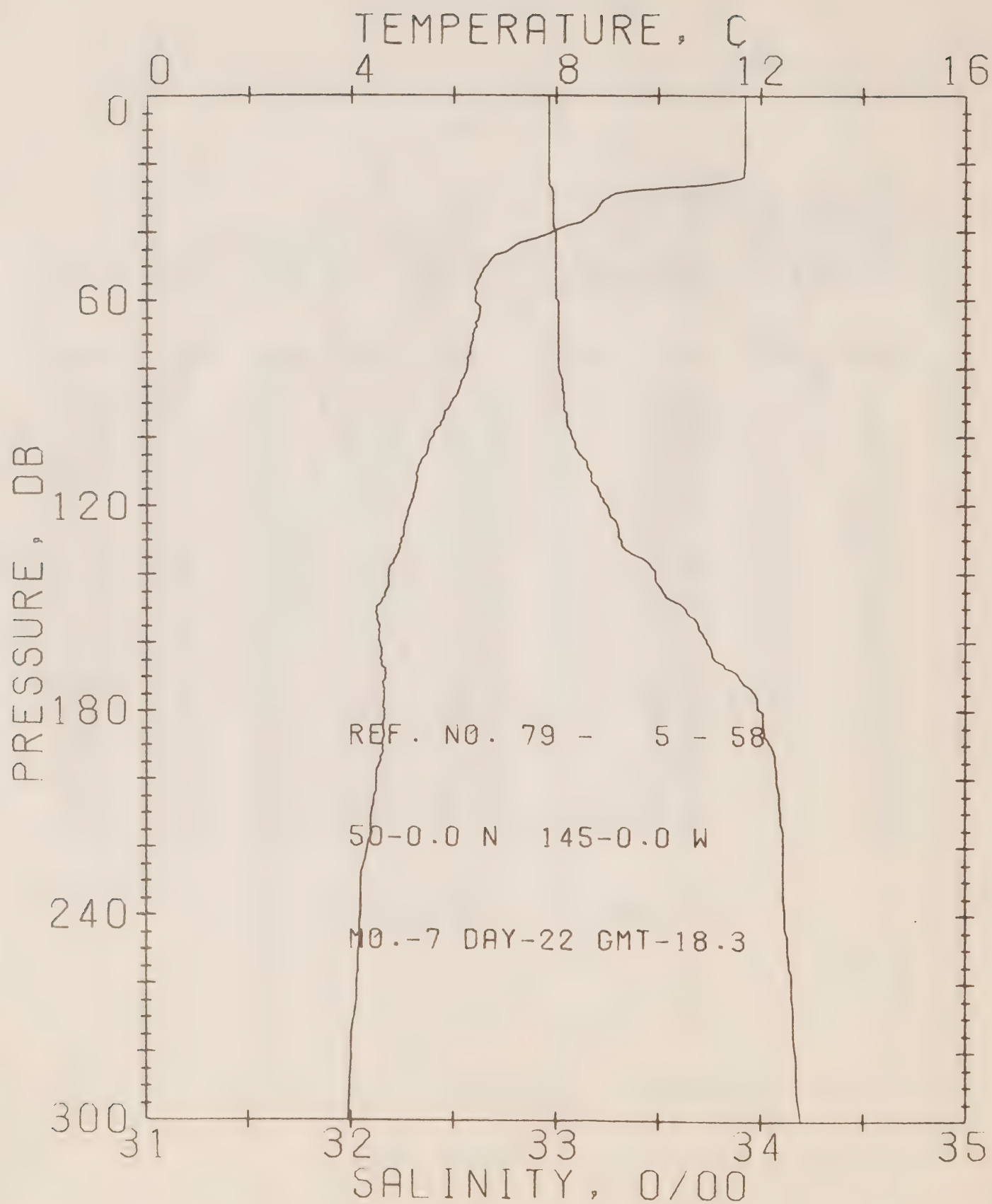
REFERENCE NO. 79- 5- 57) DATE 21/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 303 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.60	32.98	0	25.12	285.4	.00	.00	1494.
10	11.62	32.98	10	25.11	286.0	.29	.01	1494.
20	11.62	32.98	20	25.11	286.2	.57	.06	1494.
30	11.17	33.00	30	25.21	277.2	.86	.13	1493.
50	6.95	33.04	50	25.91	211.2	1.33	.32	1477.
75	6.40	33.04	75	25.98	204.5	1.85	.65	1475.
100	5.55	33.09	99	26.12	191.0	2.35	1.10	1472.
125	4.84	33.45	124	26.49	156.4	2.79	1.60	1470.
150	4.66	33.79	149	26.78	129.2	3.14	2.10	1470.
175	4.73	34.03	174	26.96	112.6	3.44	2.59	1471.
200	4.49	34.10	199	27.04	104.7	3.72	3.11	1471.
225	4.16	34.11	223	27.08	100.7	3.97	3.67	1470.
250	3.97	34.14	248	27.13	96.7	4.22	4.26	1470.
300	3.92	34.21	298	27.19	91.3	4.69	5.58	1470.
400	3.77	34.28	397	27.26	85.4	5.57	8.73	1471.
500	3.57	34.36	496	27.34	78.3	6.40	12.50	1472.
600	3.36	34.44	595	27.43	70.8	7.14	16.66	1473.
800	3.00	34.55	793	27.55	60.2	8.45	25.94	1475.
1000	2.67	34.63	990	27.64	52.0	9.56	36.14	1477.
1200	2.40	34.69	1188	27.71	45.8	10.54	47.07	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 58

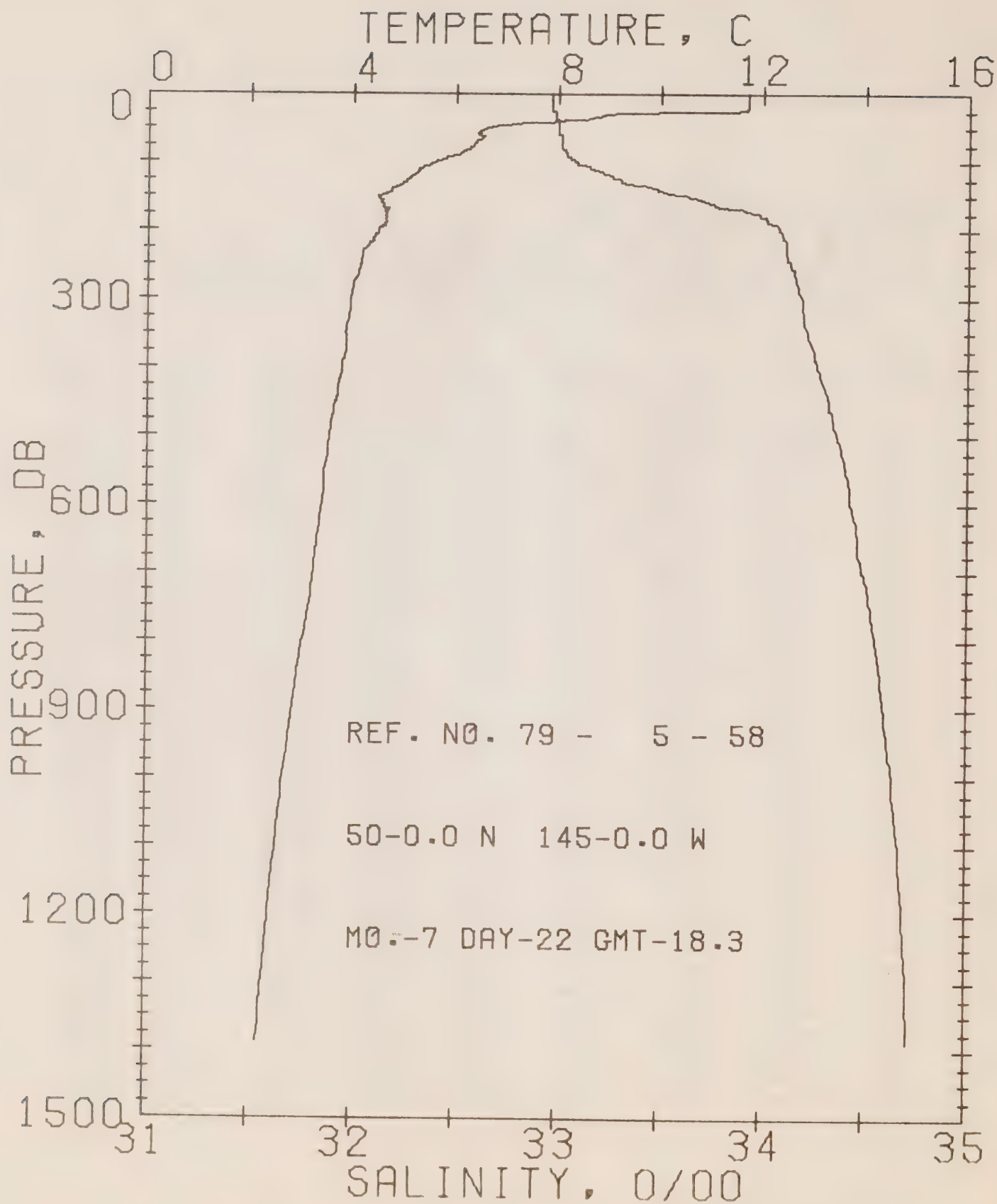
DATE 22/ 7/79

POSITION 50- .0N, 145- .0W GMT 18.3 STATION P

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.71	32.97	0	25.09	288.1	.00	.00	1494.
10	11.70	32.97	10	25.09	288.1	.29	.01	1494.
20	11.70	32.97	20	25.09	288.4	.58	.06	1494.
30	9.02	32.99	30	25.57	243.4	.85	.13	1485.
40	7.93	33.00	40	25.74	227.1	1.09	.21	1481.
50	6.65	33.00	50	25.91	210.3	1.30	.31	1476.
60	6.42	33.01	60	25.95	206.8	1.51	.43	1475.
70	6.38	33.01	70	25.96	206.5	1.72	.57	1475.
80	6.26	33.01	79	25.97	205.1	1.93	.72	1475.
90	5.95	33.04	89	26.04	199.3	2.13	.90	1474.
100	5.59	33.08	99	26.11	192.2	2.32	1.09	1473.
110	5.28	33.17	109	26.22	182.0	2.51	1.29	1472.
120	5.14	33.25	119	26.30	174.6	2.69	1.50	1471.
130	4.97	33.32	129	26.37	167.6	2.86	1.72	1471.
140	4.73	33.49	139	26.53	152.3	3.02	1.94	1470.
150	4.48	33.63	149	26.67	139.3	3.17	2.16	1469.
160	4.54	33.74	159	26.75	131.8	3.30	2.37	1470.
170	4.66	33.90	169	26.86	121.2	3.43	2.58	1471.
180	4.64	34.01	179	26.95	112.8	3.55	2.79	1471.
190	4.59	34.05	189	26.99	109.4	3.66	3.00	1471.
200	4.48	34.08	199	27.03	106.0	3.77	3.22	1471.
210	4.40	34.10	208	27.05	103.8	3.87	3.43	1471.
220	4.32	34.11	218	27.07	102.3	3.98	3.66	1471.
230	4.19	34.11	228	27.08	101.1	4.08	3.89	1470.
240	4.18	34.12	238	27.09	100.2	4.18	4.14	1470.
250	4.15	34.13	248	27.10	99.3	4.28	4.38	1470.
260	4.11	34.15	258	27.12	97.5	4.38	4.64	1470.
270	4.05	34.16	268	27.14	96.2	4.47	4.90	1470.
280	4.00	34.17	278	27.15	95.2	4.57	5.17	1470.
290	3.97	34.17	288	27.15	94.8	4.66	5.45	1470.
300	3.95	34.19	298	27.17	93.2	4.76	5.73	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 58

DATE 22/ 7/79

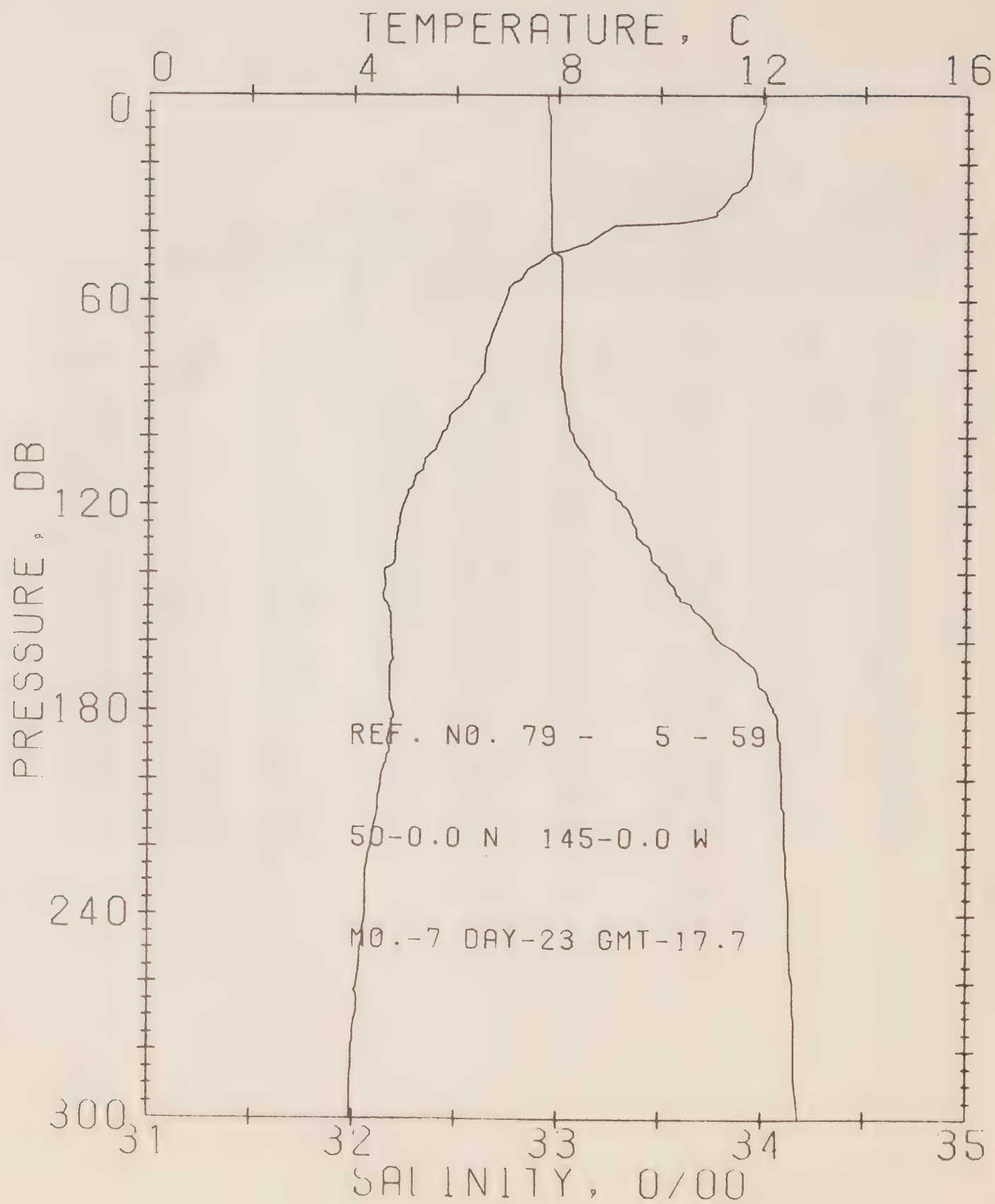
POSITION 50- .0N, 145- .0W GMT 18.3

STATION P

RESULTS OF STP CAST 309 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

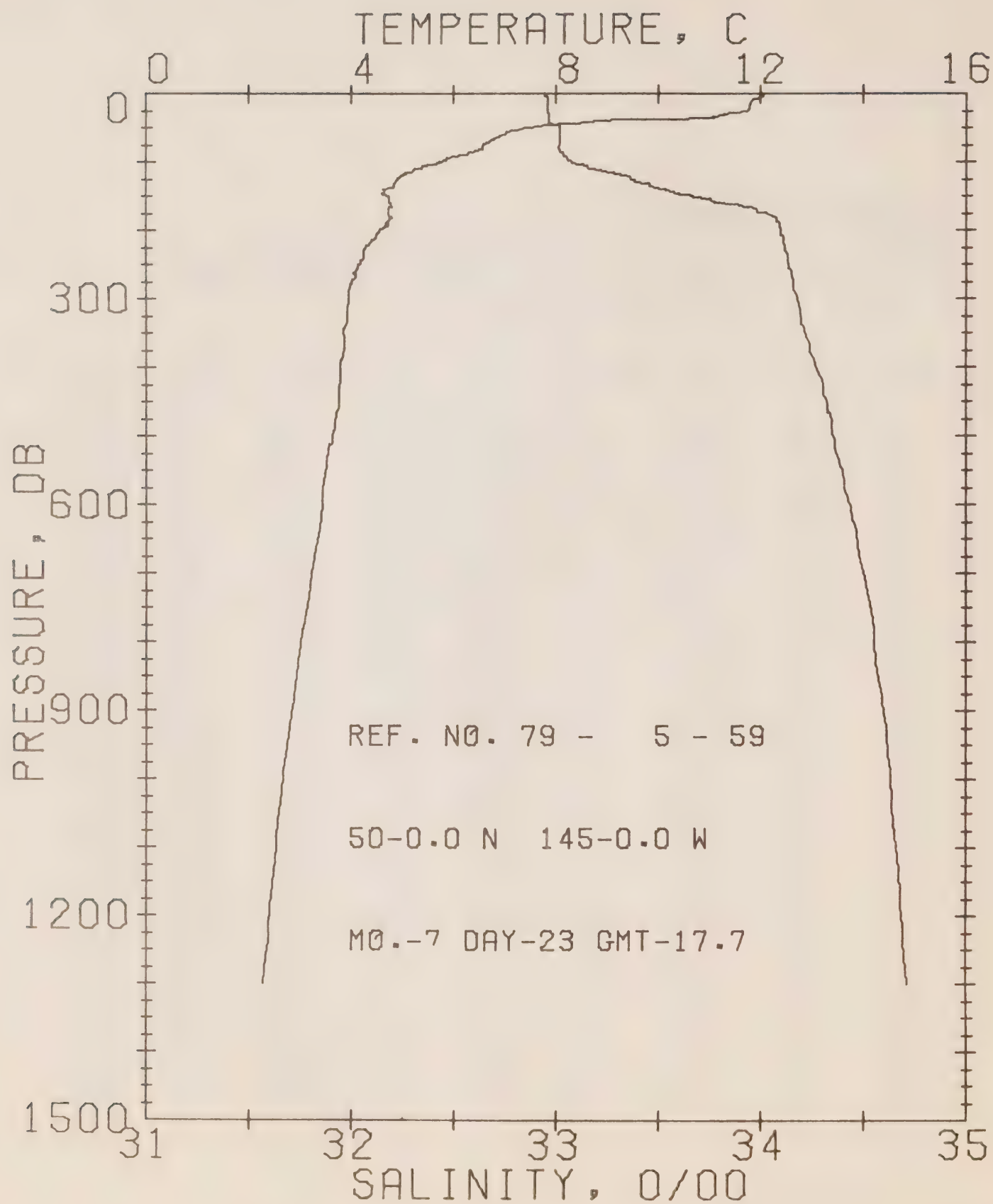
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.71	32.97	0	25.09	288.1	.00	.00	1494.
10	11.70	32.97	10	25.09	288.1	.29	.01	1494.
20	11.70	32.97	20	25.09	288.4	.58	.06	1494.
30	9.02	32.99	30	25.57	243.4	.85	.13	1485.
50	6.65	33.00	50	25.91	210.3	1.30	.31	1476.
75	6.31	33.01	75	25.97	205.7	1.82	.64	1475.
100	5.59	33.08	99	26.11	192.2	2.32	1.09	1473.
125	5.03	33.30	124	26.35	169.7	2.78	1.61	1471.
150	4.48	33.63	149	26.67	139.3	3.17	2.16	1469.
175	4.63	33.98	174	26.93	114.9	3.49	2.69	1471.
200	4.48	34.08	199	27.03	106.0	3.77	3.22	1471.
225	4.23	34.11	223	27.08	101.4	4.03	3.78	1470.
250	4.15	34.13	248	27.10	99.3	4.28	4.38	1470.
300	3.95	34.19	298	27.17	93.2	4.76	5.73	1470.
400	3.78	34.27	397	27.25	86.3	5.66	8.95	1471.
500	3.56	34.36	496	27.35	77.7	6.48	12.69	1472.
600	3.40	34.43	595	27.42	71.6	7.22	16.83	1473.
800	3.03	34.55	793	27.55	60.5	8.54	26.21	1475.
1000	2.66	34.64	990	27.65	51.4	9.66	36.44	1477.
1200	2.40	34.69	1188	27.71	45.8	10.63	47.30	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 59 DATE 23/ 7/79
 POSITION 50- .0N, 145- .0W GMT 17.7 STATION P
 RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.06	32.95	0	25.01	295.8	.00	.00	1495.
10	11.84	32.96	10	25.06	291.3	.29	.01	1495.
20	11.80	32.96	20	25.07	290.9	.58	.06	1495.
30	11.35	32.96	30	25.15	282.8	.87	.13	1493.
40	8.88	32.97	40	25.57	243.0	1.14	.23	1484.
50	7.47	33.02	50	25.82	219.5	1.37	.33	1479.
60	6.95	33.02	60	25.89	212.8	1.59	.46	1477.
70	6.69	33.02	70	25.93	209.6	1.80	.60	1476.
80	6.56	33.01	80	25.93	208.8	2.01	.75	1476.
90	6.18	33.03	89	26.00	202.3	2.22	.93	1475.
100	5.71	33.07	99	26.09	193.9	2.41	1.12	1473.
110	5.36	33.17	109	26.21	182.9	2.60	1.33	1472.
120	4.99	33.32	119	26.37	167.7	2.78	1.53	1471.
130	4.85	33.40	129	26.45	160.3	2.94	1.74	1470.
140	4.62	33.53	139	26.58	148.2	3.09	1.95	1470.
150	4.72	33.66	149	26.67	139.6	3.24	2.16	1471.
160	4.77	33.80	159	26.77	129.8	3.37	2.38	1471.
170	4.73	33.98	169	26.92	115.8	3.49	2.58	1471.
180	4.77	34.06	179	26.98	110.5	3.61	2.78	1472.
190	4.70	34.09	189	27.01	107.6	3.72	2.99	1472.
200	4.55	34.10	199	27.04	105.3	3.82	3.20	1471.
210	4.48	34.11	209	27.05	103.9	3.93	3.42	1471.
220	4.34	34.11	218	27.07	102.5	4.03	3.64	1471.
230	4.23	34.12	228	27.09	100.5	4.13	3.88	1470.
240	4.23	34.13	238	27.09	100.0	4.23	4.12	1471.
250	4.14	34.13	248	27.10	99.2	4.33	4.36	1470.
260	4.09	34.15	258	27.12	97.3	4.43	4.62	1470.
270	4.05	34.15	268	27.13	96.6	4.53	4.88	1470.
280	3.98	34.16	278	27.14	95.5	4.62	5.15	1470.
290	3.95	34.16	288	27.15	95.1	4.72	5.43	1470.
300	3.95	34.18	298	27.16	93.9	4.81	5.71	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 59

DATE 23/ 7/79

POSITION 50- .0N, 145- .0W

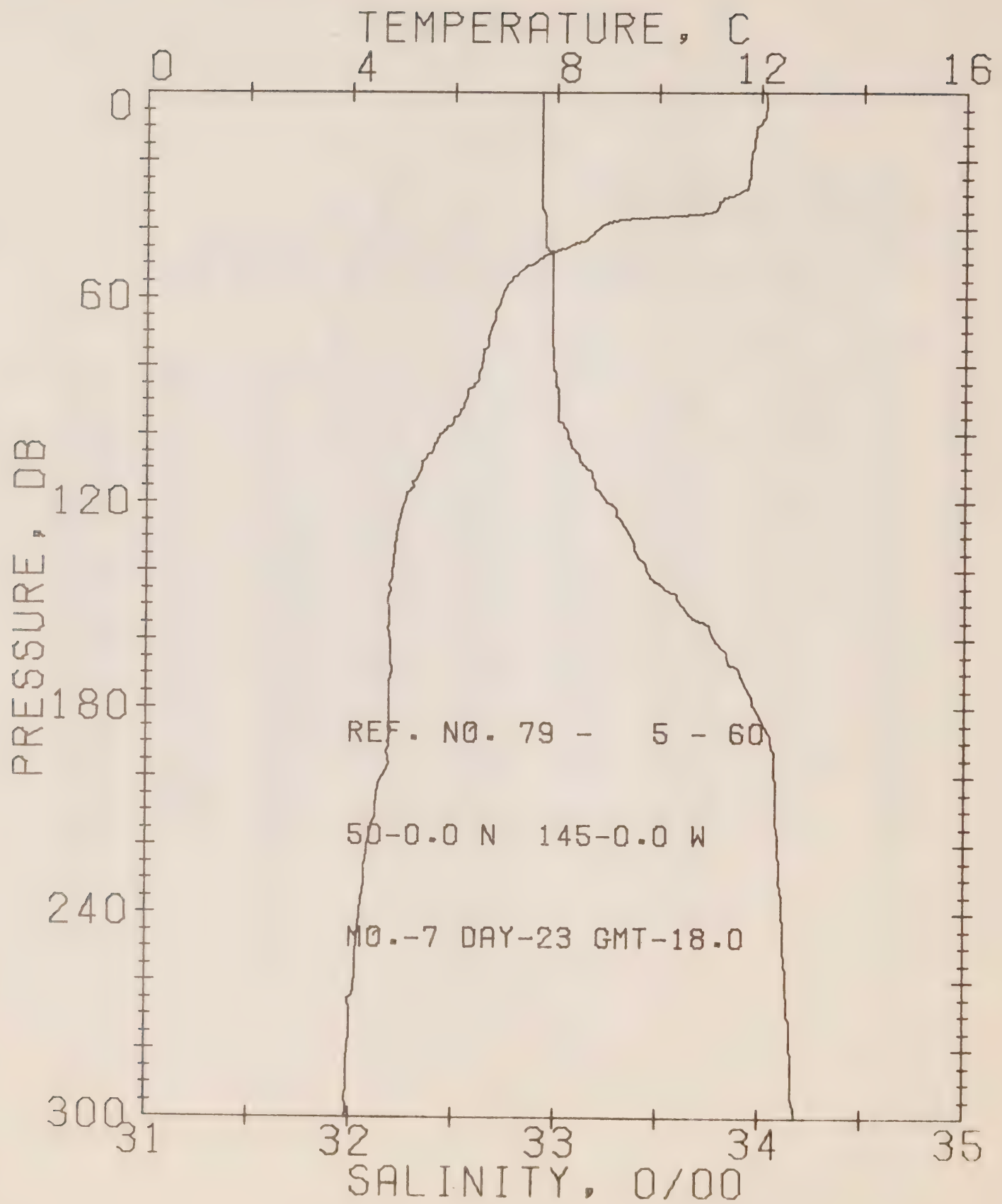
GMT 17.7

STATION P

RESULTS OF STP CAST 279 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.06	32.95	0	25.01	295.8	.00	.00	1495.
10	11.84	32.96	10	25.06	291.3	.29	.01	1495.
20	11.80	32.96	20	25.07	290.9	.58	.06	1495.
30	11.35	32.96	30	25.15	282.8	.87	.13	1493.
50	7.47	33.02	50	25.82	219.5	1.37	.33	1479.
75	6.57	33.02	75	25.94	208.3	1.91	.67	1476.
100	5.71	33.07	99	26.09	193.9	2.41	1.12	1473.
125	4.91	33.37	124	26.42	163.1	2.86	1.63	1471.
150	4.72	33.66	149	26.67	139.6	3.24	2.16	1471.
175	4.72	34.03	174	26.96	112.2	3.55	2.68	1471.
200	4.55	34.10	199	27.04	105.3	3.82	3.20	1471.
225	4.28	34.12	223	27.08	101.2	4.08	3.76	1471.
250	4.14	34.13	248	27.10	99.2	4.33	4.36	1470.
300	3.95	34.18	298	27.16	93.9	4.81	5.71	1470.
400	3.79	34.27	397	27.25	86.2	5.72	8.94	1472.
500	3.64	34.35	496	27.33	79.3	6.54	12.71	1473.
600	3.43	34.44	595	27.42	71.8	7.30	16.93	1474.
800	3.03	34.55	793	27.55	60.5	8.61	26.26	1475.
1000	2.66	34.63	990	27.64	51.8	9.73	36.47	1477.
1200	2.40	34.68	1188	27.71	46.1	10.70	47.41	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 60

DATE 23/ 7/79

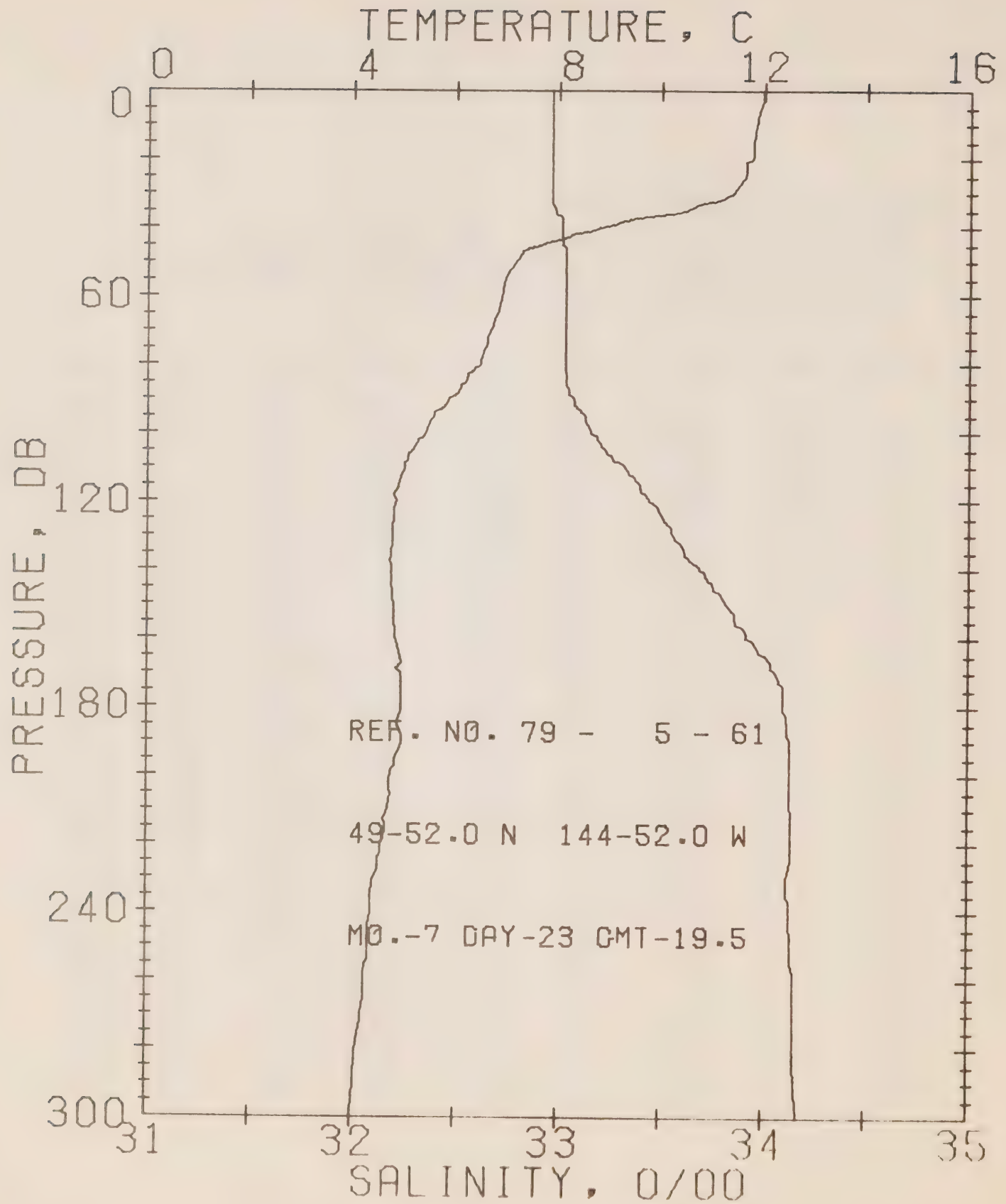
POSITION 50- .0N, 145- .0W GMT 18.0

STATION P

RESULTS OF STP CAST 183 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

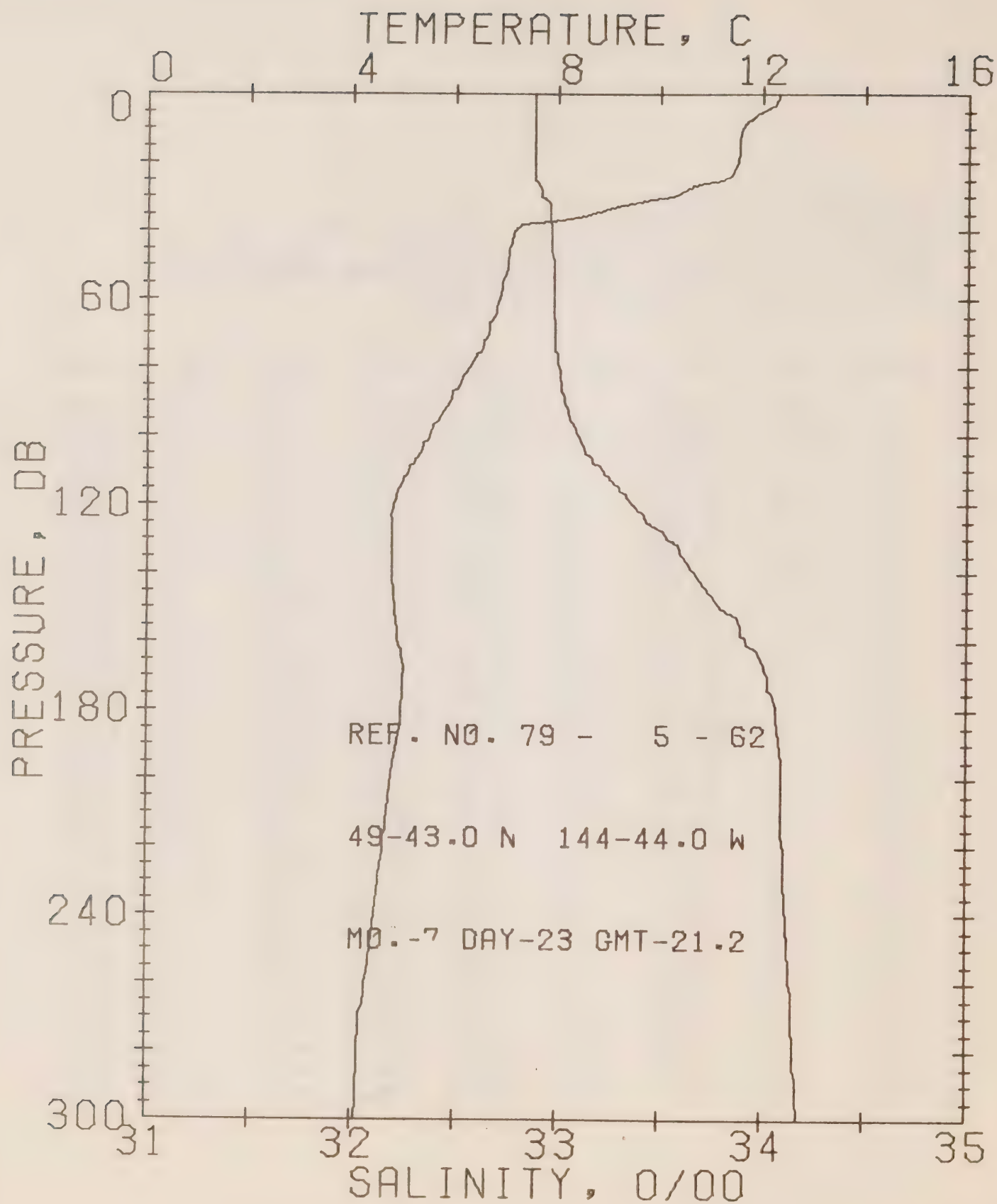
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.09	32.93	0	24.99	297.8	.00	.00	1495.
10	11.93	32.93	10	25.02	295.1	.30	.02	1495.
20	11.80	32.93	20	25.04	293.1	.59	.06	1495.
30	11.49	32.93	30	25.10	287.8	.88	.13	1494.
40	8.81	32.95	40	25.57	243.4	1.15	.23	1484.
50	7.54	32.98	50	25.78	223.4	1.39	.34	1479.
60	6.93	32.98	60	25.86	215.5	1.60	.46	1477.
70	6.69	32.98	70	25.89	212.6	1.82	.60	1476.
80	6.54	32.99	80	25.92	210.1	2.03	.76	1476.
90	6.24	33.01	89	25.98	205.0	2.24	.94	1475.
100	5.74	33.06	99	26.08	195.4	2.44	1.14	1473.
110	5.36	33.15	109	26.19	184.4	2.63	1.34	1472.
120	5.03	33.25	119	26.31	173.4	2.81	1.55	1471.
130	4.88	33.37	129	26.42	162.9	2.98	1.76	1470.
140	4.81	33.45	139	26.49	156.2	3.14	1.98	1470.
150	4.73	33.61	149	26.63	143.1	3.28	2.20	1471.
160	4.77	33.78	159	26.76	131.3	3.42	2.42	1471.
170	4.80	33.90	169	26.85	122.3	3.55	2.63	1471.
180	4.75	33.98	179	26.92	116.3	3.67	2.85	1472.
190	4.71	34.05	189	26.98	110.7	3.78	3.06	1472.
200	4.60	34.07	199	27.01	108.1	3.89	3.28	1471.
210	4.49	34.08	209	27.03	106.3	4.00	3.50	1471.
220	4.31	34.09	218	27.05	103.7	4.10	3.73	1471.
230	4.26	34.10	228	27.07	102.6	4.20	3.97	1471.
240	4.19	34.11	238	27.08	100.9	4.31	4.21	1470.
250	4.12	34.12	248	27.10	99.7	4.41	4.46	1470.
260	4.09	34.13	258	27.11	98.8	4.51	4.72	1470.
270	4.00	34.14	268	27.13	97.2	4.60	4.98	1470.
280	3.97	34.15	278	27.14	96.2	4.70	5.25	1470.
290	3.96	34.16	288	27.15	95.4	4.80	5.53	1470.
300	3.92	34.18	298	27.17	93.6	4.89	5.82	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 61 DATE 23/ 7/79
 POSITION 49-52.0N, 144-52.0W GMT 19.5 STATION E3
 RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	11.98	32.97	0	25.04	292.9	.00	.00	1495.
10	11.83	32.97	10	25.07	290.4	.29	.01	1494.
20	11.76	32.97	20	25.08	289.4	.58	.06	1494.
30	11.38	32.97	30	25.15	283.0	.87	.13	1493.
40	8.80	33.01	40	25.62	238.8	1.13	.23	1484.
50	7.17	33.03	50	25.87	214.8	1.35	.33	1478.
60	6.88	33.03	60	25.91	211.1	1.57	.45	1477.
70	6.68	33.03	70	25.93	208.7	1.78	.59	1476.
80	6.48	33.03	80	25.96	206.3	1.98	.74	1476.
90	5.87	33.07	89	26.07	196.1	2.19	.92	1473.
100	5.41	33.16	99	26.19	184.1	2.38	1.10	1472.
110	5.00	33.33	109	26.38	167.0	2.55	1.29	1471.
120	4.85	33.45	119	26.49	156.4	2.71	1.48	1470.
130	4.77	33.56	129	26.58	147.4	2.86	1.67	1470.
140	4.75	33.69	139	26.69	137.6	3.01	1.87	1471.
150	4.79	33.82	149	26.79	128.4	3.14	2.06	1471.
160	4.84	33.92	159	26.86	121.6	3.26	2.26	1472.
170	4.93	34.06	169	26.96	112.2	3.38	2.46	1472.
180	4.97	34.10	179	26.99	109.7	3.49	2.65	1473.
190	4.95	34.13	189	27.01	107.4	3.60	2.86	1473.
200	4.75	34.13	199	27.04	105.3	3.71	3.07	1472.
210	4.68	34.13	208	27.05	104.2	3.81	3.29	1472.
220	4.57	34.14	218	27.06	102.8	3.91	3.52	1472.
230	4.44	34.12	228	27.06	102.9	4.02	3.75	1471.
240	4.38	34.13	238	27.08	101.6	4.12	4.00	1471.
250	4.33	34.14	248	27.09	100.5	4.22	4.25	1471.
260	4.24	34.15	258	27.11	98.9	4.32	4.51	1471.
270	4.19	34.15	268	27.11	98.4	4.42	4.77	1471.
280	4.10	34.15	278	27.12	97.5	4.52	5.05	1471.
290	4.04	34.16	288	27.14	96.3	4.61	5.33	1471.
300	3.99	34.17	298	27.15	95.1	4.71	5.62	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 62

DATE 23/ 7/79

POSITION 49-43.0N, 144-44.0W

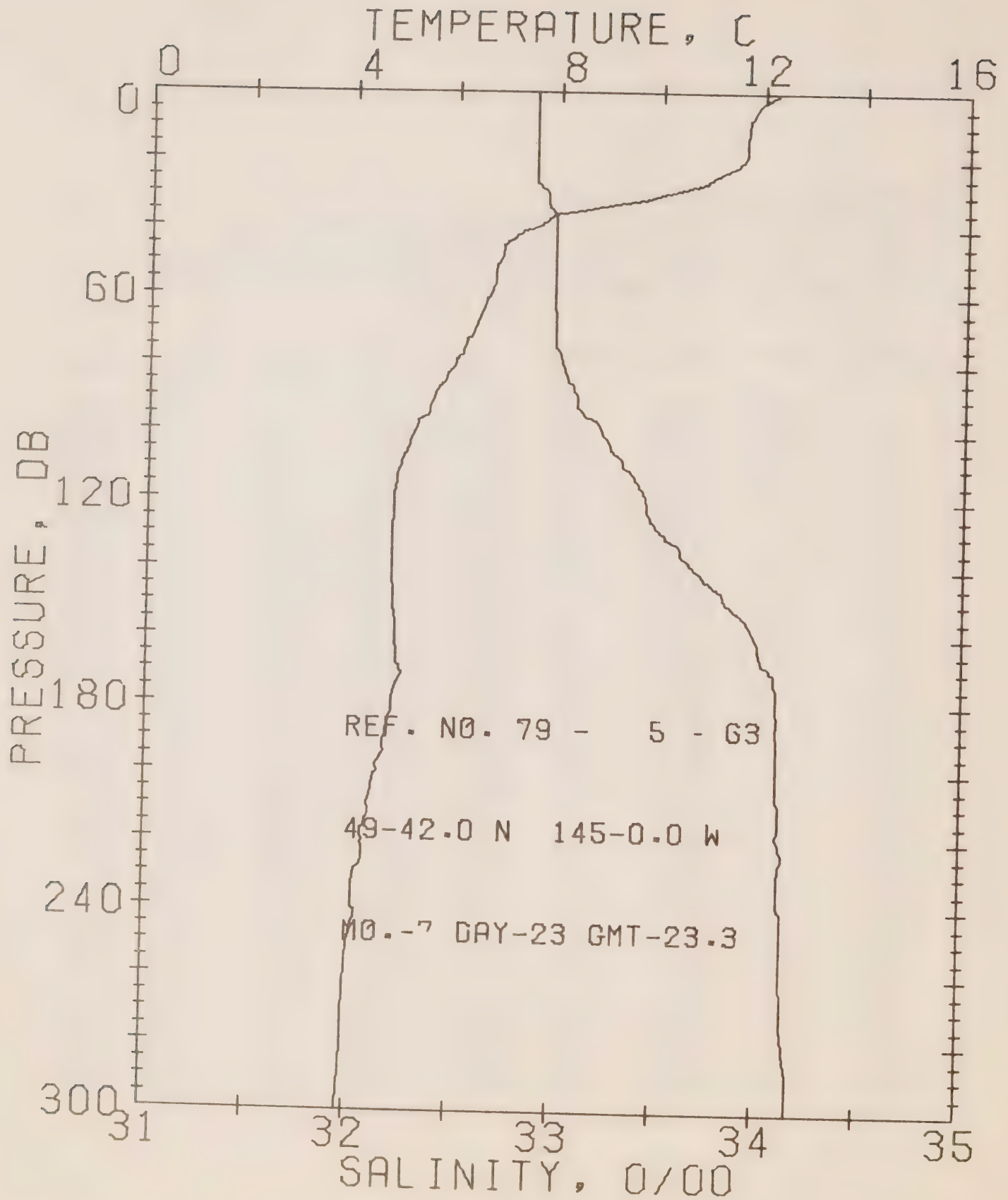
GMT 21.2

STATION E4

RESULTS OF STP CAST 150 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

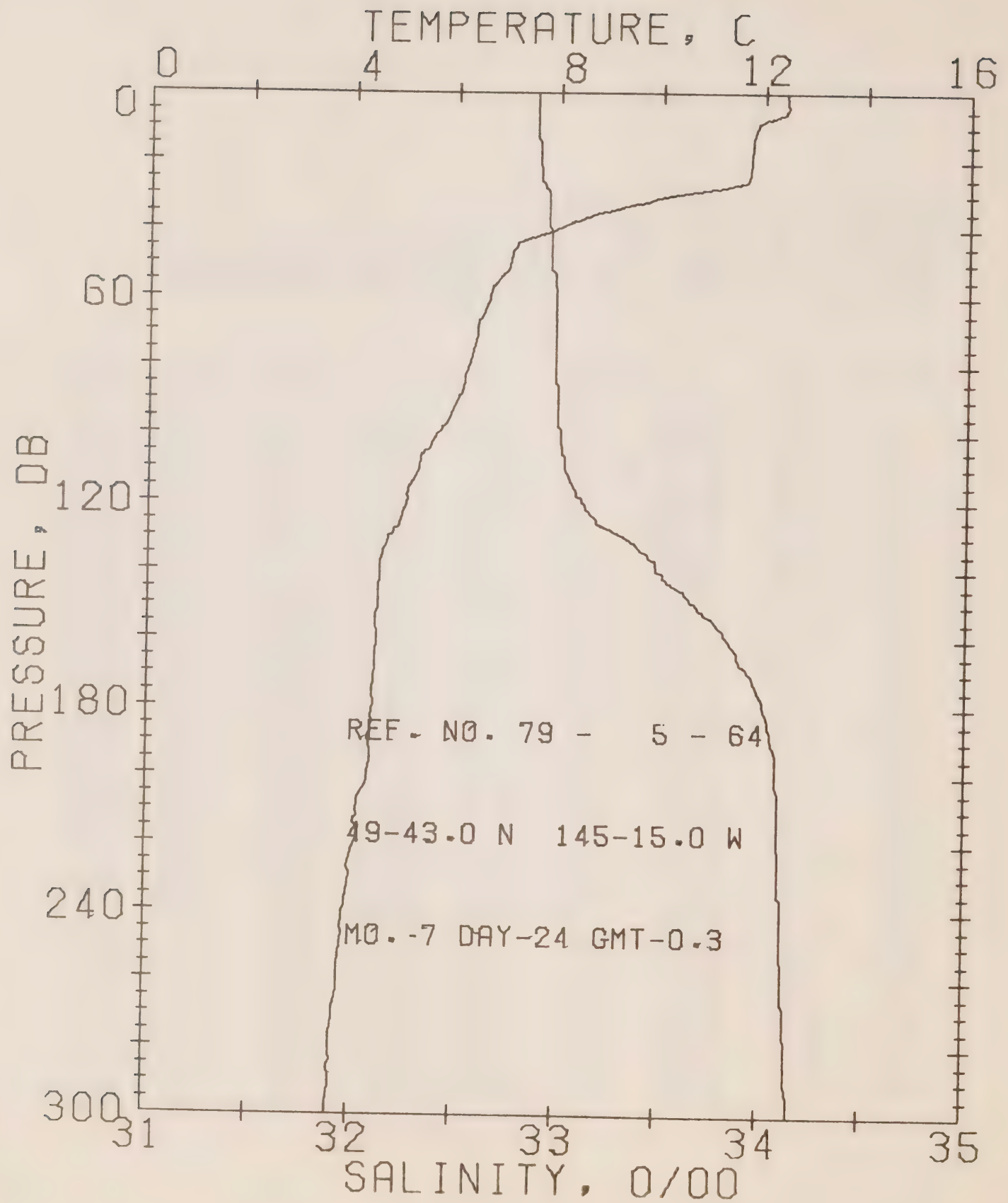
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.30	32.89	0	24.92	304.5	.00	.00	1496.
10	11.59	32.89	10	25.05	292.1	.30	.02	1494.
20	11.52	32.89	20	25.06	291.1	.59	.06	1493.
30	10.23	32.92	30	25.31	267.4	.87	.13	1489.
40	7.14	32.97	40	25.83	218.7	1.11	.22	1478.
50	7.01	32.98	50	25.85	216.4	1.33	.32	1477.
60	6.85	32.98	60	25.87	214.5	1.54	.44	1477.
70	6.65	32.99	70	25.91	211.3	1.76	.58	1476.
80	6.27	33.01	80	25.97	205.6	1.97	.74	1475.
90	5.89	33.03	89	26.03	199.3	2.17	.91	1473.
100	5.49	33.10	99	26.14	189.5	2.36	1.10	1472.
110	5.09	33.22	109	26.28	176.1	2.55	1.30	1471.
120	4.80	33.37	119	26.43	161.9	2.72	1.49	1470.
130	4.78	33.53	129	26.56	149.8	2.87	1.69	1470.
140	4.78	33.67	139	26.67	139.5	3.01	1.89	1471.
150	4.82	33.80	149	26.77	130.2	3.15	2.09	1471.
160	4.90	33.92	159	26.86	121.8	3.27	2.29	1472.
170	4.99	34.03	169	26.93	115.1	3.39	2.48	1472.
180	4.97	34.07	179	26.96	111.9	3.51	2.69	1473.
190	4.87	34.09	189	26.99	109.7	3.62	2.90	1472.
200	4.76	34.10	199	27.01	107.6	3.73	3.11	1472.
210	4.70	34.10	208	27.02	107.1	3.83	3.34	1472.
220	4.60	34.11	218	27.04	105.5	3.94	3.57	1472.
230	4.53	34.11	228	27.05	104.7	4.04	3.81	1472.
240	4.45	34.12	238	27.06	103.1	4.15	4.06	1471.
250	4.37	34.13	248	27.08	101.6	4.25	4.32	1471.
260	4.28	34.14	258	27.10	100.0	4.35	4.58	1471.
270	4.15	34.15	268	27.12	98.0	4.45	4.84	1471.
280	4.12	34.16	278	27.13	97.1	4.55	5.12	1471.
290	4.11	34.17	288	27.14	96.2	4.64	5.40	1471.
300	4.09	34.18	298	27.15	95.2	4.74	5.69	1471.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 63 DATE 23/ 7/79
 POSITION 49-42.0N, 145- .0W GMT 23.3 STATION C1
 RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE
 GUIDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.24	32.88	0	24.92	304.1	.00	.00	1496.
10	11.68	32.88	10	25.03	294.4	.30	.02	1494.
20	11.59	32.88	20	25.04	293.1	.59	.06	1494.
30	9.96	32.94	30	25.37	261.6	.87	.13	1488.
40	7.50	32.98	40	25.78	222.7	1.11	.22	1479.
50	6.84	32.98	50	25.87	214.2	1.33	.32	1477.
60	6.65	32.98	60	25.90	211.9	1.54	.43	1476.
70	6.35	32.99	70	25.95	207.6	1.75	.57	1475.
80	6.00	33.02	80	26.01	201.2	1.96	.73	1474.
90	5.56	33.10	89	26.13	190.2	2.15	.90	1472.
100	5.20	33.22	99	26.27	177.3	2.34	1.08	1471.
110	4.95	33.33	109	26.38	166.4	2.51	1.26	1470.
120	4.84	33.44	119	26.48	156.8	2.67	1.45	1470.
130	4.80	33.53	129	26.56	150.0	2.82	1.65	1470.
140	4.80	33.68	139	26.68	138.8	2.97	1.85	1471.
150	4.84	33.84	149	26.80	127.4	3.10	2.04	1471.
160	4.88	33.98	159	26.90	117.5	3.22	2.23	1472.
170	4.96	34.06	169	26.96	112.5	3.34	2.43	1472.
180	4.84	34.09	179	27.00	109.1	3.45	2.62	1472.
190	4.70	34.10	189	27.02	106.9	3.55	2.83	1472.
200	4.56	34.10	199	27.03	105.4	3.66	3.04	1471.
210	4.38	34.11	208	27.06	102.9	3.77	3.26	1471.
220	4.29	34.11	218	27.07	102.0	3.87	3.48	1470.
230	4.13	34.11	228	27.09	100.4	3.97	3.71	1470.
240	4.11	34.12	238	27.10	99.5	4.07	3.95	1470.
250	4.02	34.13	248	27.12	97.9	4.17	4.20	1470.
260	3.99	34.13	258	27.12	97.7	4.27	4.45	1470.
270	3.96	34.14	268	27.13	96.7	4.36	4.72	1470.
280	3.94	34.15	278	27.14	96.0	4.46	4.99	1470.
290	3.91	34.17	288	27.16	94.1	4.55	5.26	1470.
300	3.87	34.17	298	27.16	93.8	4.65	5.54	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 64

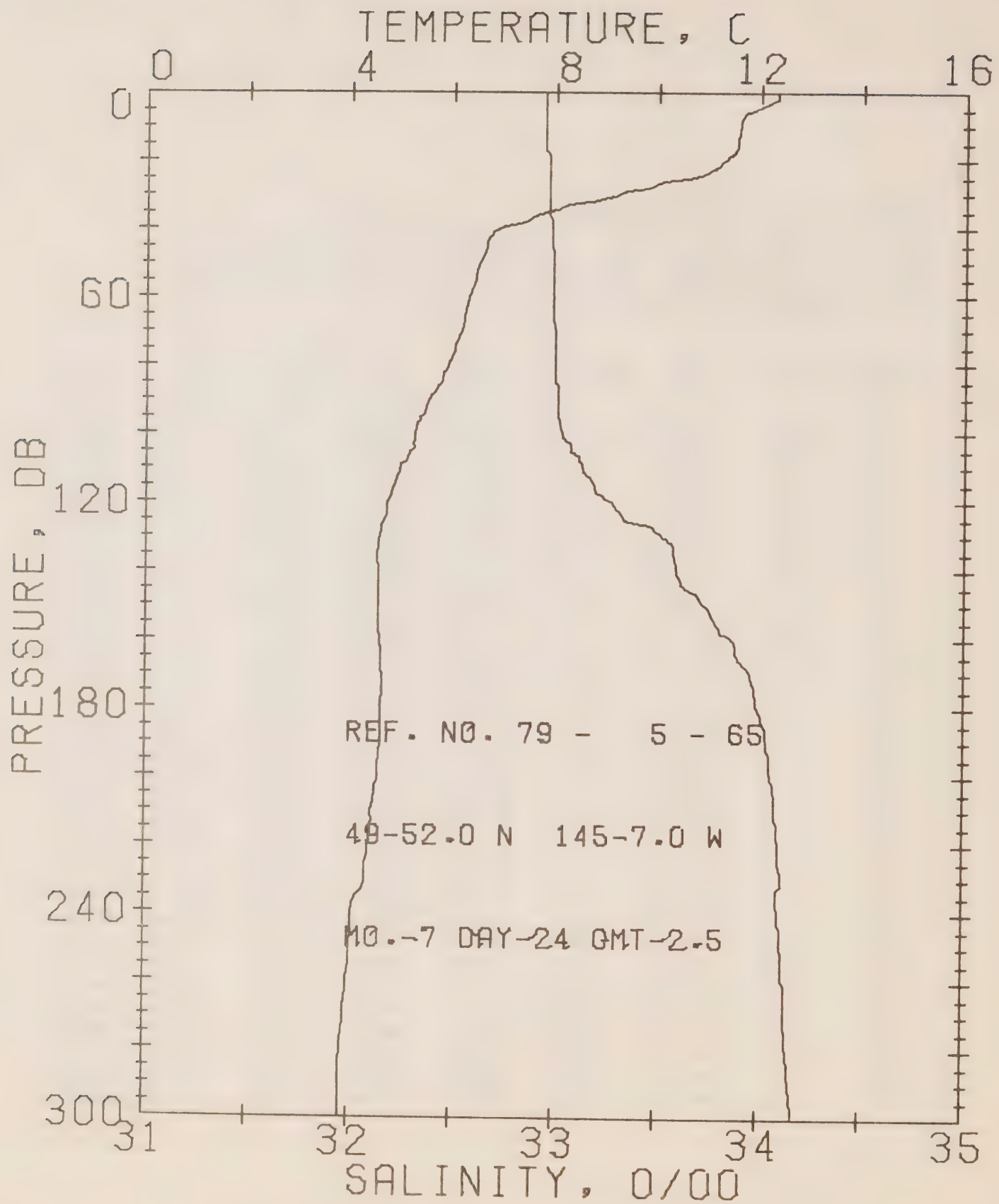
DATE 24/ 7/79

POSITION 49-43.0N, 145-15.0W GMT .3 STATION W4

RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

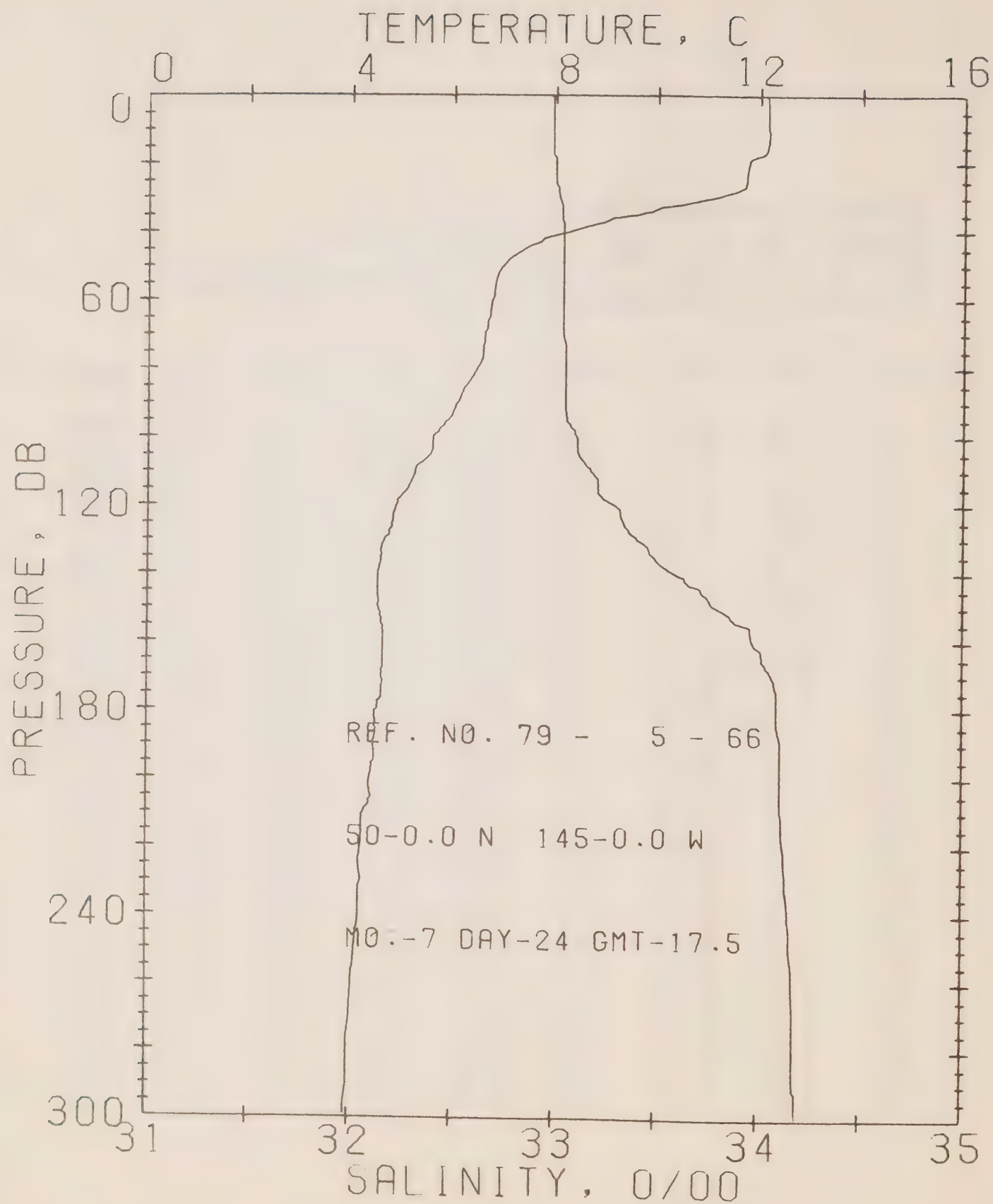
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.40	32.89	0	24.90	306.3	.00	.00	1496.
10	11.85	32.89	10	25.00	296.6	.30	.02	1494.
20	11.73	32.90	20	25.03	294.0	.60	.06	1494.
30	10.15	32.95	30	25.35	263.9	.89	.13	1489.
40	7.93	32.95	40	25.70	230.5	1.13	.22	1481.
50	7.01	32.96	50	25.83	218.0	1.35	.32	1477.
60	6.64	32.99	60	25.91	211.1	1.57	.44	1476.
70	6.39	32.99	70	25.94	208.1	1.78	.58	1475.
80	6.25	32.99	80	25.96	206.5	1.98	.74	1475.
90	6.02	33.00	89	26.00	203.1	2.19	.92	1474.
100	5.64	33.01	99	26.05	198.0	2.39	1.11	1473.
110	5.27	33.03	109	26.11	192.4	2.58	1.32	1471.
120	5.04	33.12	119	26.21	183.2	2.77	1.54	1471.
130	4.70	33.33	129	26.41	163.9	2.95	1.76	1470.
140	4.54	33.49	139	26.55	150.3	3.10	1.98	1469.
150	4.52	33.68	149	26.71	136.0	3.25	2.19	1470.
160	4.47	33.84	159	26.83	123.9	3.38	2.39	1470.
170	4.44	33.95	169	26.93	115.4	3.50	2.59	1470.
180	4.41	34.01	179	26.98	109.9	3.61	2.79	1470.
190	4.34	34.05	189	27.02	106.4	3.72	3.00	1470.
200	4.33	34.08	199	27.04	104.5	3.82	3.21	1470.
210	4.11	34.09	209	27.07	101.5	3.92	3.42	1470.
220	4.09	34.09	218	27.08	101.3	4.03	3.64	1470.
230	3.99	34.10	228	27.09	99.7	4.13	3.87	1469.
240	3.88	34.11	238	27.11	97.9	4.22	4.11	1469.
250	3.84	34.11	248	27.12	97.6	4.32	4.35	1469.
260	3.80	34.12	258	27.13	96.5	4.42	4.61	1469.
270	3.70	34.13	268	27.15	94.9	4.51	4.87	1469.
280	3.65	34.14	278	27.16	93.7	4.61	5.13	1469.
290	3.65	34.14	288	27.16	93.8	4.70	5.40	1469.
300	3.58	34.15	298	27.17	92.4	4.80	5.68	1469.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 65 DATE 24/ 7/79
 POSITION 49-52.0N, 145- 7.0W GMT 2.5 STATION P
 RESULTS OF STP CAST 172 POINTS TAKEN FROM ANALOG TRACE
 GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.32	32.95	0	24.96	300.4	.00	.00	1496.
10	11.58	32.95	10	25.10	287.6	.29	.01	1494.
20	11.27	32.97	20	25.17	280.9	.58	.06	1493.
30	9.21	32.97	30	25.52	247.8	.85	.13	1485.
40	6.89	32.98	40	25.87	214.7	1.08	.21	1477.
50	6.52	32.99	50	25.92	209.4	1.29	.30	1475.
60	6.29	32.99	60	25.95	206.7	1.49	.42	1475.
70	6.17	33.00	70	25.98	204.7	1.70	.56	1474.
80	5.89	33.00	79	26.01	201.4	1.90	.71	1473.
90	5.52	33.01	89	26.06	196.5	2.10	.89	1472.
100	5.26	33.03	99	26.11	192.2	2.30	1.07	1471.
110	4.97	33.13	109	26.23	181.2	2.48	1.27	1470.
120	4.72	33.28	119	26.37	167.8	2.66	1.48	1470.
130	4.58	33.53	129	26.58	147.6	2.82	1.68	1469.
140	4.55	33.60	139	26.64	142.4	2.96	1.88	1470.
150	4.55	33.73	149	26.74	132.5	3.10	2.09	1470.
160	4.58	33.87	159	26.85	122.5	3.23	2.29	1470.
170	4.63	33.96	169	26.92	116.4	3.35	2.49	1471.
180	4.62	33.99	179	26.94	113.7	3.47	2.69	1471.
190	4.61	34.04	189	26.98	110.4	3.58	2.91	1471.
200	4.55	34.06	199	27.00	108.6	3.69	3.12	1471.
210	4.43	34.08	208	27.03	105.6	3.79	3.35	1471.
220	4.38	34.10	218	27.05	103.7	3.90	3.58	1471.
230	4.31	34.11	228	27.07	102.4	4.00	3.81	1471.
240	4.06	34.10	238	27.09	100.5	4.10	4.06	1470.
250	4.02	34.11	248	27.10	99.3	4.20	4.31	1470.
260	3.97	34.12	258	27.12	97.9	4.30	4.56	1470.
270	3.92	34.13	268	27.13	97.0	4.40	4.83	1470.
280	3.86	34.14	278	27.14	95.6	4.50	5.10	1470.
290	3.85	34.16	288	27.16	94.3	4.59	5.37	1470.
300	3.83	34.17	298	27.17	93.4	4.68	5.65	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 66

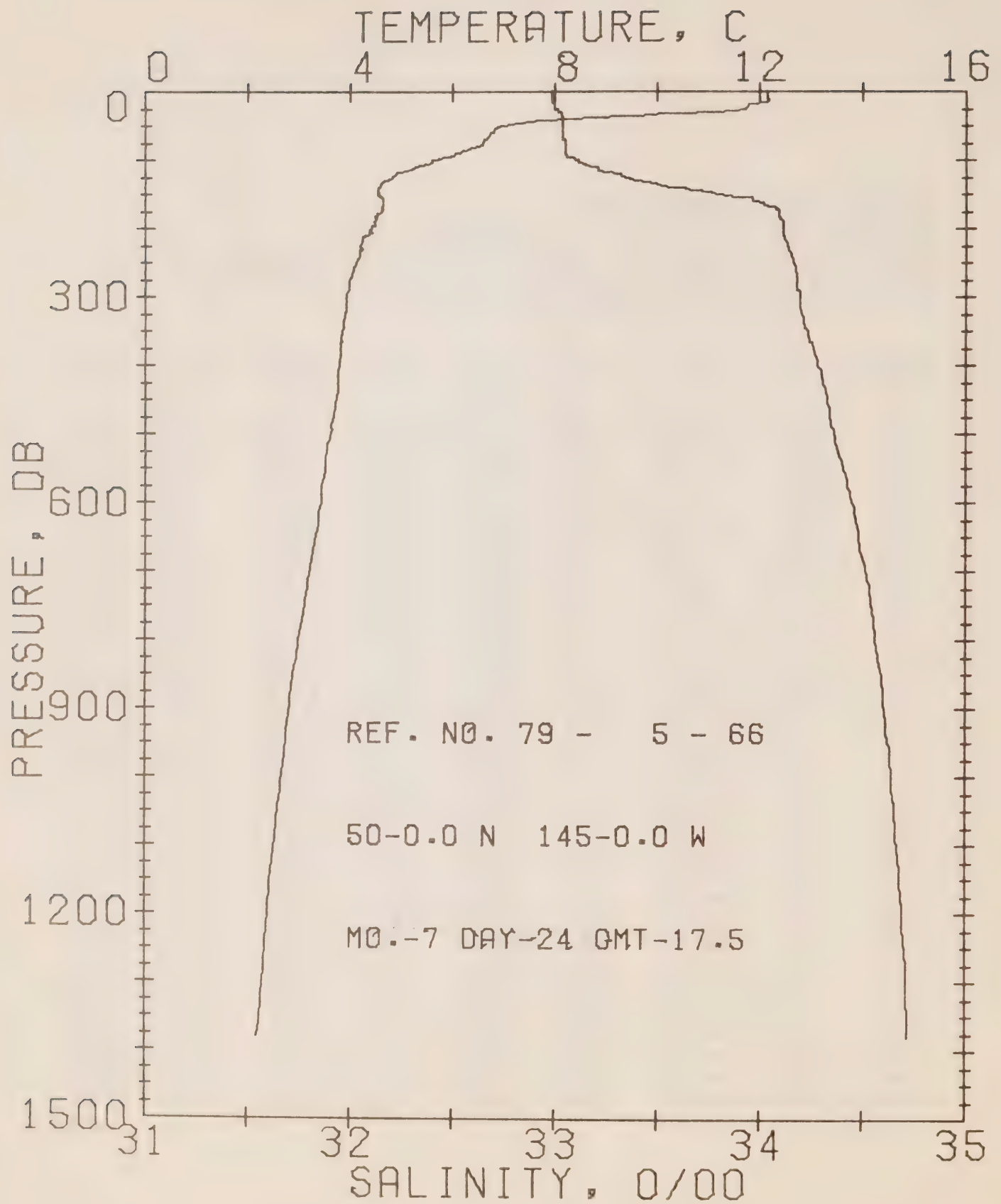
DATE 24/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.14	32.99	0	25.03	294.2	.00	.00	1495.
10	12.17	32.99	10	25.02	295.0	.29	.02	1496.
20	11.79	33.00	20	25.10	287.7	.59	.06	1495.
30	11.07	33.02	30	25.25	274.0	.87	.13	1492.
40	8.29	33.04	40	25.72	229.2	1.12	.22	1482.
50	6.99	33.04	50	25.90	211.7	1.34	.32	1477.
60	6.77	33.04	60	25.93	208.9	1.55	.44	1477.
70	6.62	33.04	70	25.95	207.2	1.76	.58	1476.
80	6.47	33.05	80	25.98	204.7	1.96	.73	1476.
90	6.12	33.05	89	26.02	200.6	2.17	.91	1474.
100	5.60	33.11	99	26.13	190.1	2.36	1.10	1473.
110	5.26	33.18	109	26.23	181.1	2.55	1.30	1471.
120	4.90	33.30	119	26.36	168.2	2.73	1.51	1470.
130	4.68	33.41	129	26.47	157.7	2.89	1.71	1470.
140	4.54	33.59	139	26.63	142.8	3.04	1.92	1470.
150	4.54	33.80	149	26.80	127.2	3.17	2.12	1470.
160	4.63	33.97	159	26.93	115.2	3.29	2.31	1471.
170	4.62	34.07	169	27.00	108.0	3.41	2.50	1471.
180	4.54	34.09	179	27.03	105.8	3.51	2.69	1471.
190	4.45	34.11	189	27.05	103.4	3.62	2.88	1471.
200	4.39	34.11	199	27.06	102.9	3.72	3.09	1471.
210	4.28	34.11	208	27.08	101.4	3.82	3.30	1470.
220	4.22	34.13	218	27.09	99.9	3.92	3.52	1470.
230	4.23	34.14	228	27.10	99.2	4.02	3.75	1470.
240	4.18	34.15	238	27.11	98.0	4.12	3.99	1470.
250	4.11	34.16	248	27.13	96.6	4.22	4.23	1470.
260	4.04	34.17	258	27.14	95.2	4.31	4.48	1470.
270	4.02	34.18	268	27.15	94.4	4.41	4.74	1470.
280	3.98	34.18	278	27.16	94.0	4.50	5.00	1470.
290	3.97	34.18	288	27.16	94.0	4.60	5.27	1470.
300	3.91	34.19	298	27.17	92.8	4.69	5.55	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 66

DATE 24/ 7/79

POSITION 50- .0N, 145- .0W

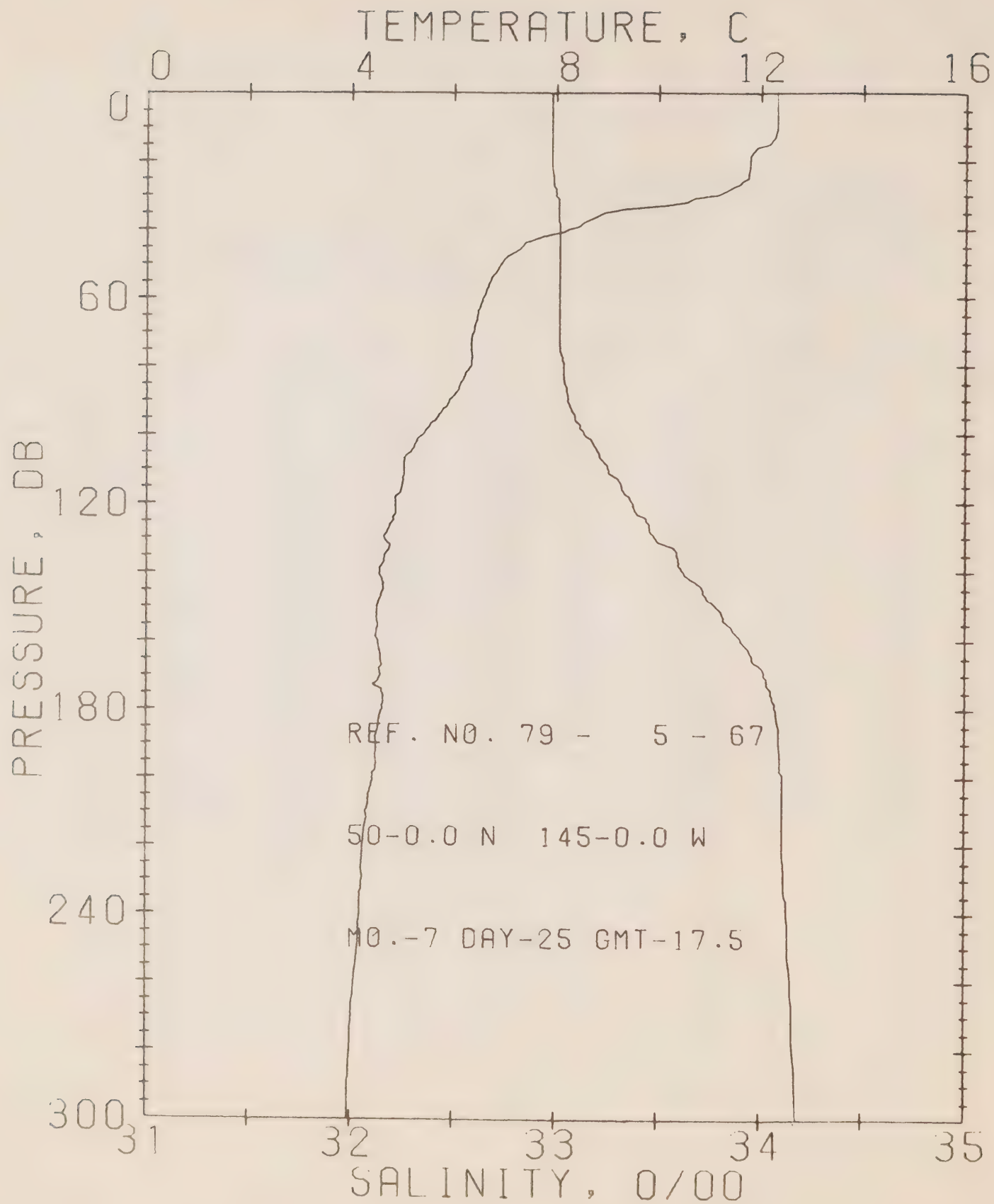
GMT 17.5

STATION P

RESULTS OF STP CAST 278 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.14	32.99	0	25.03	294.2	.00	.00	1495.
10	12.17	32.99	10	25.02	295.0	.29	.02	1496.
20	11.79	33.00	20	25.10	287.7	.59	.06	1495.
30	11.07	33.02	30	25.25	274.0	.87	.13	1492.
50	6.99	33.04	50	25.90	211.7	1.34	.32	1477.
75	6.59	33.05	75	25.96	206.2	1.86	.65	1476.
100	5.60	33.11	99	26.13	190.1	2.36	1.10	1473.
125	4.82	33.34	124	26.40	164.4	2.81	1.61	1470.
150	4.54	33.80	149	26.80	127.2	3.17	2.12	1470.
175	4.62	34.09	174	27.02	106.6	3.46	2.59	1471.
200	4.39	34.11	199	27.06	102.9	3.72	3.09	1471.
225	4.20	34.13	223	27.10	99.6	3.97	3.64	1470.
250	4.11	34.16	248	27.13	96.6	4.22	4.23	1470.
300	3.91	34.19	298	27.17	92.8	4.69	5.55	1470.
400	3.78	34.28	397	27.26	85.5	5.59	8.74	1471.
500	3.62	34.36	496	27.34	78.5	6.40	12.48	1473.
600	3.43	34.45	595	27.43	70.8	7.15	16.65	1474.
800	2.99	34.56	793	27.56	59.3	8.44	25.83	1475.
1000	2.66	34.64	990	27.65	51.3	9.54	35.88	1477.
1200	2.39	34.69	1108	27.71	45.7	10.51	46.70	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 67

DATE 25/ 7/79

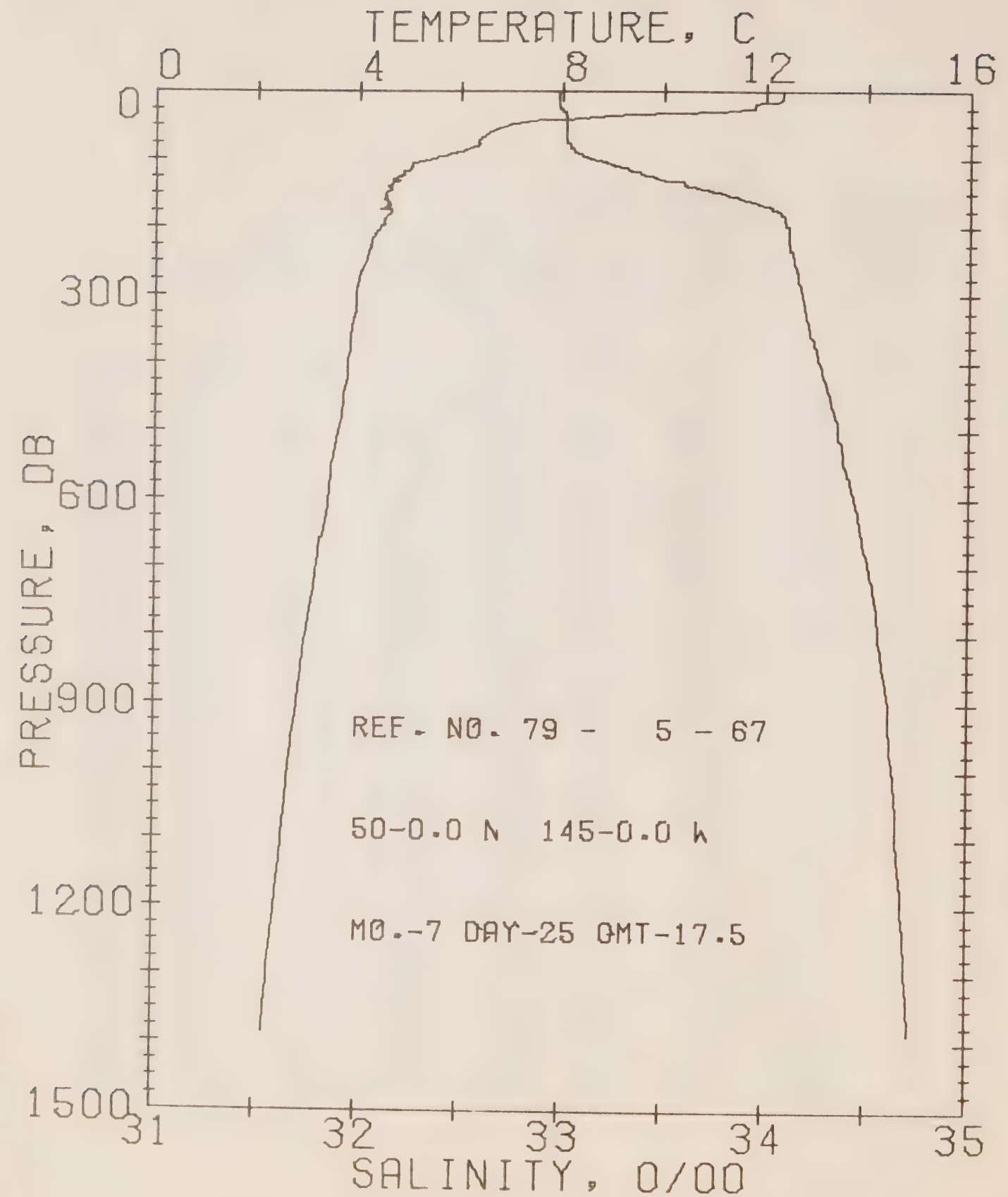
POSITION 50- .0N, 145- .0W GMT 17.5

STATION P

RESULTS OF STP CAST 192 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.32	32.98	0	24.98	298.2	.00	.00	1496.
10	12.32	32.98	10	24.98	298.5	.30	.02	1496.
20	11.79	32.98	20	25.08	289.2	.59	.06	1495.
30	11.14	33.00	30	25.22	276.7	.88	.13	1492.
40	8.25	33.02	40	25.71	230.1	1.13	.22	1482.
50	6.94	33.02	50	25.89	212.5	1.35	.32	1477.
60	6.59	33.02	60	25.94	208.1	1.56	.44	1476.
70	6.41	33.02	70	25.96	206.1	1.76	.58	1475.
80	6.34	33.04	80	25.99	203.9	1.97	.73	1475.
90	5.91	33.06	89	26.06	197.3	2.17	.91	1474.
100	5.42	33.14	99	26.18	185.8	2.36	1.09	1472.
110	5.04	33.26	109	26.32	172.6	2.54	1.28	1471.
120	4.87	33.38	119	26.43	161.9	2.71	1.48	1470.
130	4.65	33.49	129	26.54	151.4	2.86	1.68	1470.
140	4.56	33.62	139	26.65	140.8	3.01	1.88	1470.
150	4.52	33.79	149	26.79	127.7	3.14	2.08	1470.
160	4.54	33.91	159	26.89	119.1	3.27	2.27	1470.
170	4.59	34.02	169	26.97	111.5	3.38	2.47	1471.
180	4.61	34.08	179	27.01	107.3	3.49	2.66	1471.
190	4.51	34.09	189	27.03	105.6	3.60	2.86	1471.
200	4.44	34.11	199	27.06	103.4	3.70	3.07	1471.
210	4.30	34.11	208	27.07	102.0	3.80	3.28	1470.
220	4.24	34.11	218	27.08	101.5	3.90	3.51	1470.
230	4.24	34.12	228	27.08	100.8	4.01	3.74	1470.
240	4.18	34.13	238	27.10	99.5	4.11	3.98	1470.
250	4.14	34.14	248	27.11	98.4	4.20	4.22	1470.
260	4.06	34.15	258	27.13	97.0	4.30	4.48	1470.
270	4.02	34.16	268	27.14	95.9	4.40	4.74	1470.
280	3.99	34.16	278	27.15	95.4	4.49	5.01	1470.
290	3.94	34.17	288	27.16	94.4	4.59	5.28	1470.
300	3.95	34.18	298	27.16	93.9	4.68	5.57	1470.



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REFERENCE NO. 79- 5- 67

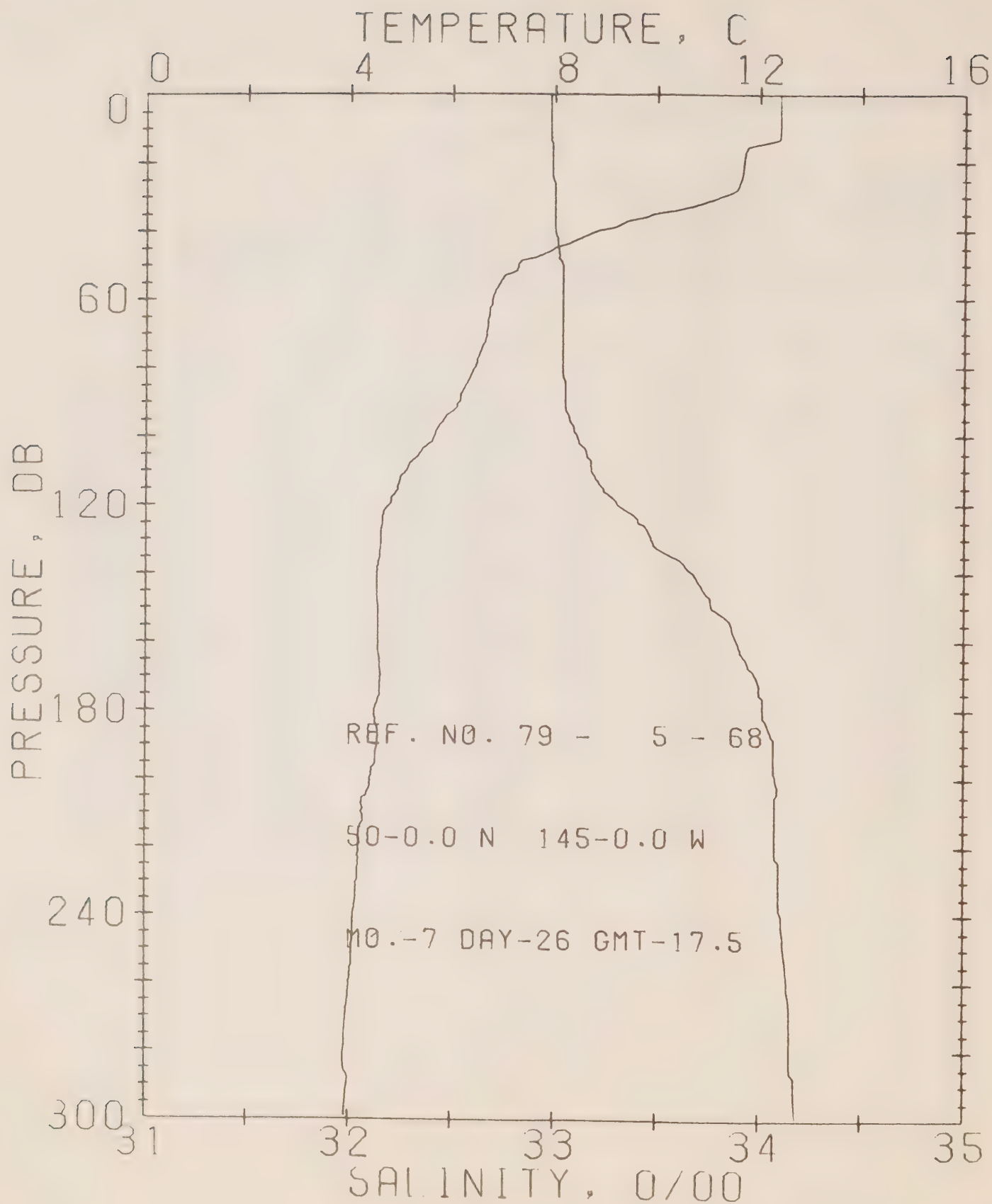
DATE 25/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.32	32.98	0	24.98	298.2	.00	.00	1496.
10	12.32	32.98	10	24.98	298.5	.30	.02	1496.
20	11.79	32.98	20	25.08	289.2	.59	.06	1495.
30	11.14	33.00	30	25.22	276.7	.88	.13	1492.
50	6.94	33.02	50	25.89	212.5	1.35	.32	1477.
75	6.36	33.02	75	25.97	205.5	1.86	.65	1475.
100	5.42	33.14	99	26.18	185.8	2.36	1.09	1472.
125	4.82	33.45	124	26.49	156.2	2.79	1.58	1470.
150	4.52	33.79	149	26.79	127.7	3.14	2.08	1470.
175	4.61	34.05	174	26.99	109.5	3.44	2.56	1471.
200	4.44	34.11	199	27.06	103.4	3.70	3.07	1471.
225	4.22	34.12	223	27.08	100.8	3.96	3.62	1470.
250	4.14	34.14	248	27.11	98.4	4.20	4.22	1470.
300	3.95	34.18	298	27.16	93.9	4.68	5.57	1470.
400	3.80	34.27	397	27.25	86.5	5.59	8.79	1472.
500	3.62	34.36	496	27.34	78.6	6.41	12.56	1473.
600	3.42	34.44	595	27.42	71.2	7.16	16.75	1473.
800	2.99	34.56	793	27.56	59.3	8.46	25.95	1475.
1000	2.66	34.63	990	27.65	51.6	9.56	36.04	1477.
1200	2.40	34.68	1188	27.70	46.5	10.54	47.04	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 68

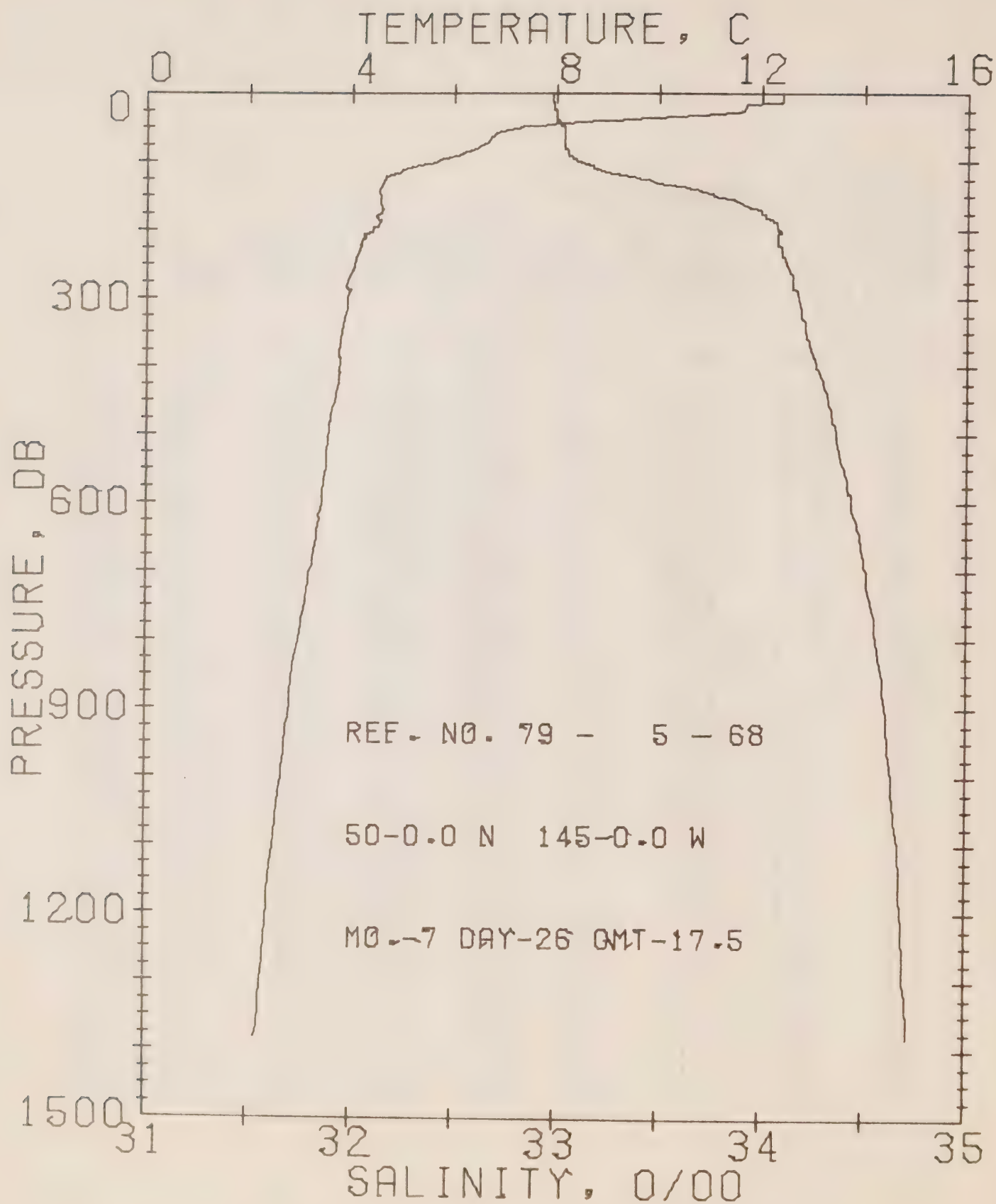
DATE 26/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.40	32.98	0	24.97	299.7	.00	.00	1496.
10	12.40	32.98	10	24.97	299.9	.30	.02	1496.
20	11.69	32.99	20	25.11	286.7	.59	.06	1494.
30	11.28	33.00	30	25.19	279.0	.88	.13	1493.
40	8.84	33.00	40	25.60	240.2	1.14	.22	1484.
50	7.29	33.04	50	25.86	215.6	1.36	.33	1478.
60	6.80	33.04	60	25.93	209.3	1.58	.45	1477.
70	6.68	33.04	70	25.94	208.0	1.78	.59	1476.
80	6.45	33.04	80	25.97	205.2	1.99	.74	1476.
90	6.16	33.05	89	26.02	201.0	2.19	.92	1475.
100	5.65	33.11	99	26.13	190.6	2.39	1.11	1473.
110	5.13	33.18	109	26.24	179.6	2.57	1.31	1471.
120	4.80	33.31	119	26.38	166.4	2.75	1.51	1470.
130	4.60	33.47	129	26.53	152.0	2.90	1.71	1469.
140	4.54	33.68	139	26.70	136.1	3.05	1.91	1470.
150	4.55	33.77	149	26.77	129.5	3.18	2.10	1470.
160	4.56	33.89	159	26.87	120.5	3.30	2.30	1470.
170	4.60	33.99	169	26.94	113.8	3.42	2.50	1471.
180	4.49	34.02	179	26.98	110.5	3.53	2.70	1471.
190	4.55	34.07	189	27.01	107.5	3.64	2.90	1471.
200	4.41	34.08	199	27.03	105.3	3.75	3.11	1471.
210	4.24	34.08	208	27.05	103.6	3.85	3.33	1470.
220	4.19	34.08	218	27.06	103.2	3.96	3.56	1470.
230	4.16	34.10	228	27.08	101.5	4.06	3.79	1470.
240	4.09	34.11	238	27.09	100.1	4.16	4.03	1470.
250	4.06	34.12	248	27.10	99.0	4.26	4.28	1470.
260	4.00	34.14	258	27.13	97.1	4.36	4.54	1470.
270	3.95	34.15	268	27.14	95.9	4.45	4.80	1470.
280	3.91	34.15	278	27.14	95.6	4.55	5.07	1470.
290	3.97	34.17	288	27.15	94.8	4.65	5.34	1470.
300	3.93	34.18	298	27.16	93.6	4.74	5.63	1470.



OFFSHORE OCEANOGRAPHY GROUP

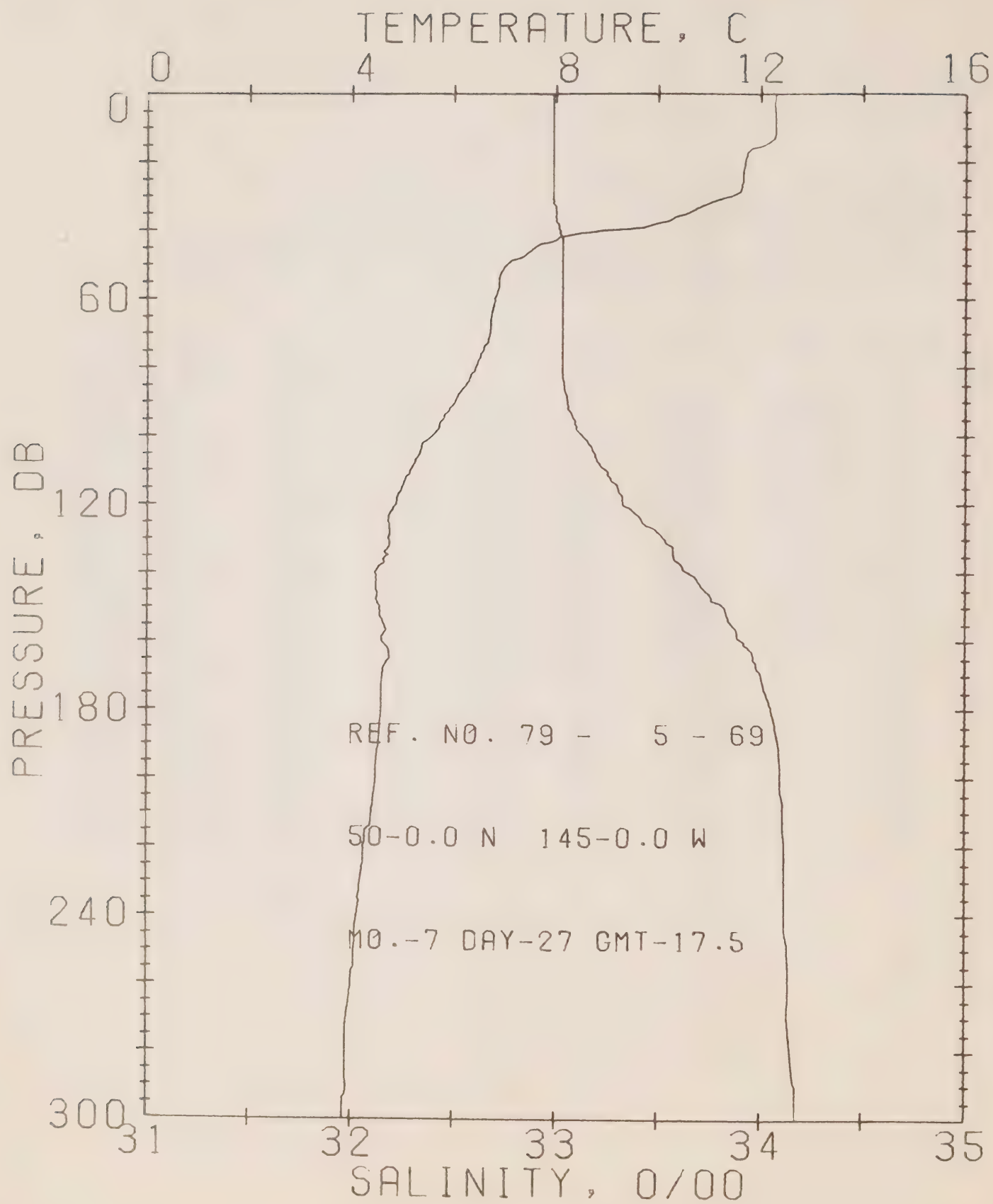
REFERENCE NO. 79- 5- 68

DATE 26/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 305 POINTS TAKEN FROM ANALOG TRACE
GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.40	32.98	0	24.97	299.7	.00	.00	1496.
10	12.40	32.98	10	24.97	299.9	.30	.02	1496.
20	11.69	32.99	20	25.11	286.7	.59	.06	1494.
30	11.28	33.00	30	25.19	279.0	.88	.13	1493.
50	7.29	33.04	50	25.86	215.6	1.36	.33	1478.
75	6.57	33.04	75	25.96	206.7	1.89	.66	1476.
100	5.65	33.11	99	26.13	190.6	2.39	1.11	1473.
125	4.65	33.41	124	26.48	157.3	2.83	1.61	1469.
150	4.55	33.77	149	26.77	129.5	3.18	2.10	1470.
175	4.58	34.00	174	26.95	112.9	3.48	2.60	1471.
200	4.41	34.08	199	27.03	105.3	3.75	3.11	1471.
225	4.18	34.10	223	27.07	101.7	4.01	3.67	1470.
250	4.06	34.12	248	27.10	99.0	4.26	4.28	1470.
300	3.93	34.18	298	27.16	93.6	4.74	5.63	1470.
400	3.76	34.27	397	27.25	86.1	5.64	8.84	1471.
500	3.56	34.37	496	27.35	77.3	6.46	12.56	1472.
600	3.44	34.44	595	27.42	71.5	7.20	16.74	1474.
800	2.99	34.56	793	27.56	59.3	8.50	25.97	1475.
1000	2.66	34.64	990	27.65	51.3	9.60	36.04	1477.
1200	2.36	34.69	1188	27.71	45.9	10.57	46.86	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 69

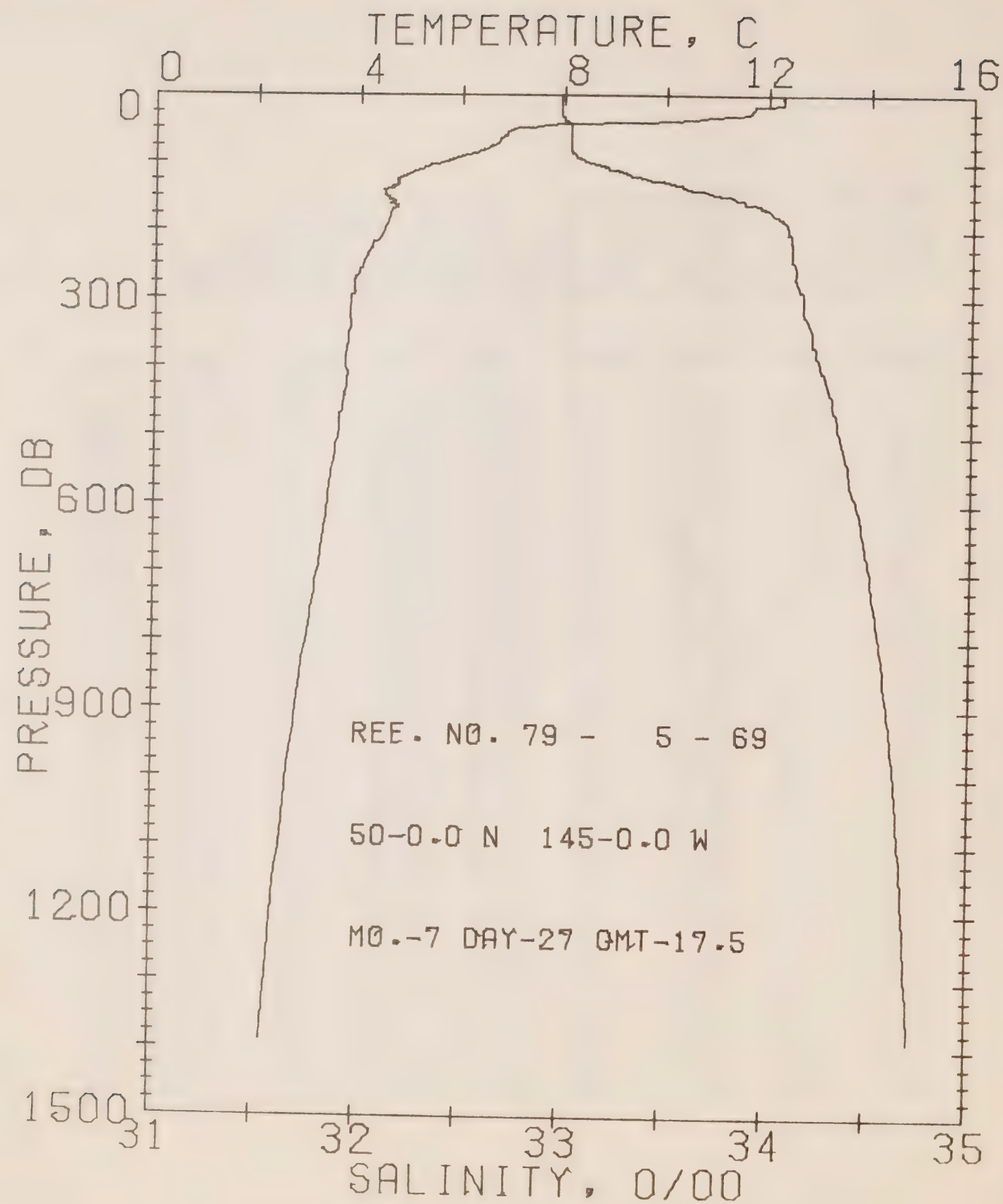
DATE 27/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.31	32.99	0	24.99	297.3	.00	.00	1496.
10	12.30	32.99	10	25.00	297.4	.30	.02	1496.
20	11.70	32.99	20	25.11	286.9	.59	.06	1494.
30	11.41	32.99	30	25.16	282.0	.88	.13	1493.
40	8.95	33.02	40	25.60	240.3	1.14	.23	1485.
50	7.05	33.03	50	25.89	213.2	1.36	.33	1477.
60	6.81	33.03	60	25.92	210.2	1.57	.45	1477.
70	6.70	33.03	70	25.93	209.0	1.78	.59	1476.
80	6.44	33.03	80	25.97	205.8	1.99	.74	1476.
90	6.04	33.06	89	26.04	199.1	2.19	.92	1474.
100	5.58	33.13	99	26.15	188.3	2.39	1.11	1473.
110	5.15	33.25	109	26.30	174.6	2.57	1.30	1471.
120	4.87	33.33	119	26.39	165.6	2.74	1.50	1470.
130	4.73	33.53	129	26.56	149.3	2.90	1.70	1470.
140	4.46	33.65	139	26.69	137.5	3.04	1.90	1469.
150	4.56	33.83	149	26.82	125.2	3.17	2.09	1470.
160	4.59	33.92	159	26.89	118.8	3.29	2.29	1470.
170	4.60	34.00	169	26.95	112.7	3.41	2.48	1471.
180	4.59	34.05	179	26.99	109.3	3.52	2.68	1471.
190	4.54	34.09	189	27.03	106.2	3.63	2.88	1471.
200	4.49	34.10	199	27.04	104.7	3.73	3.09	1471.
210	4.39	34.11	208	27.06	103.0	3.84	3.31	1471.
220	4.24	34.12	218	27.08	100.7	3.94	3.53	1470.
230	4.18	34.12	228	27.09	100.2	4.04	3.76	1470.
240	4.10	34.12	238	27.10	99.5	4.14	4.00	1470.
250	4.06	34.13	248	27.11	98.4	4.24	4.25	1470.
260	4.01	34.14	258	27.12	97.2	4.34	4.50	1470.
270	3.91	34.13	268	27.13	97.0	4.43	4.77	1470.
280	3.89	34.15	278	27.14	95.6	4.53	5.03	1470.
290	3.91	34.17	288	27.16	94.2	4.63	5.31	1470.
300	3.83	34.17	298	27.17	93.4	4.72	5.59	1470.



OFFSHORE OCEANOGRAPHY GROUP

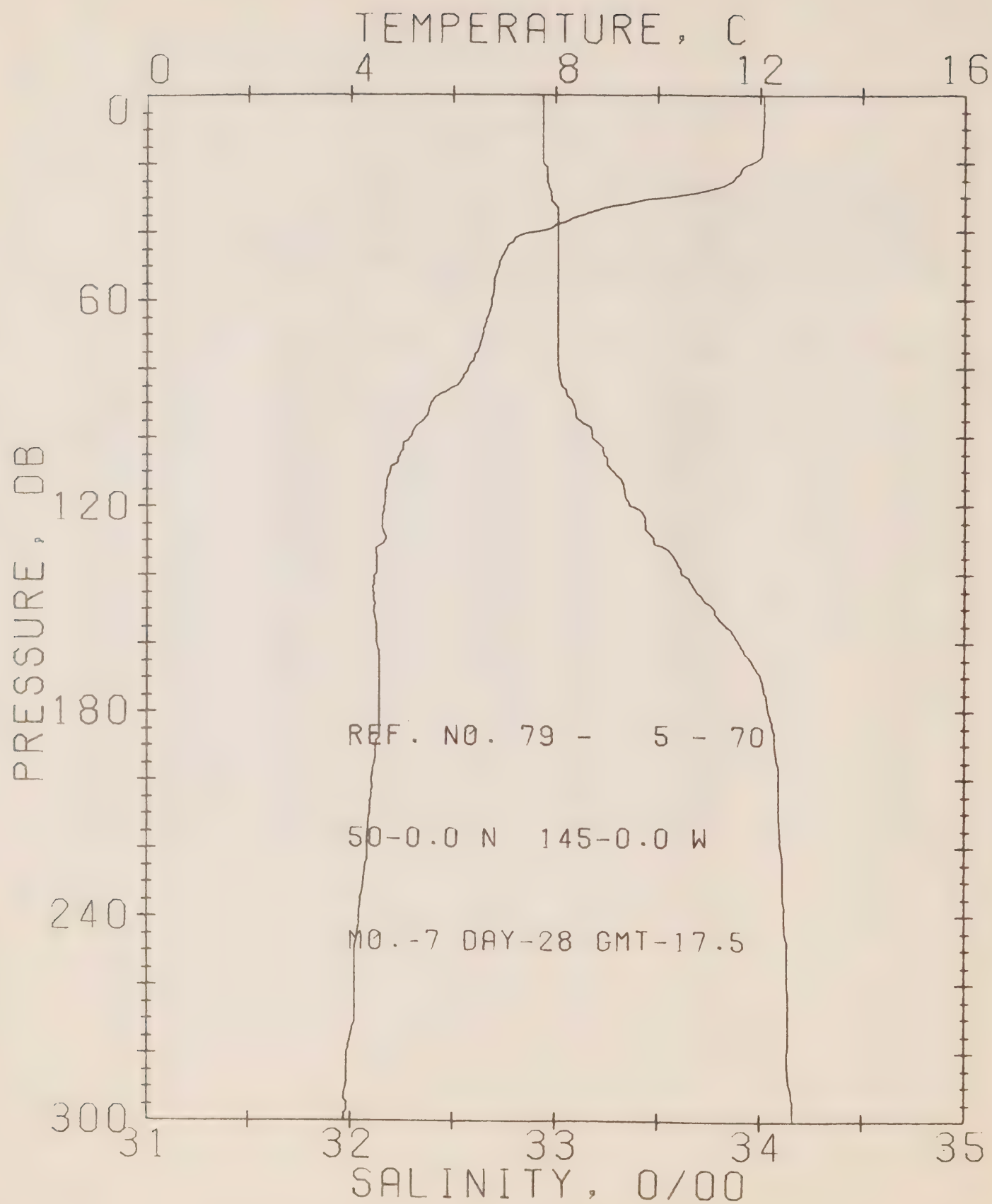
REFERENCE NO. 79- 5- 69

DATE 27/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 288 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.31	32.99	0	24.99	297.3	.00	.00	1496.
10	12.30	32.99	10	25.00	297.4	.30	.02	1496.
20	11.70	32.99	20	25.11	286.9	.59	.06	1494.
30	11.41	32.99	30	25.16	282.0	.88	.13	1493.
50	7.05	33.03	50	25.89	213.2	1.36	.33	1477.
75	6.59	33.03	75	25.95	207.7	1.89	.66	1476.
100	5.58	33.13	99	26.15	188.3	2.39	1.11	1473.
125	4.71	33.43	124	26.49	156.5	2.82	1.60	1470.
150	4.56	33.83	149	26.82	125.2	3.17	2.09	1470.
175	4.59	34.03	174	26.97	111.1	3.47	2.58	1471.
200	4.49	34.10	199	27.04	104.7	3.73	3.09	1471.
225	4.24	34.12	223	27.08	100.8	3.99	3.65	1470.
250	4.06	34.13	248	27.11	98.4	4.24	4.25	1470.
300	3.83	34.17	298	27.17	93.4	4.72	5.59	1470.
400	3.74	34.26	397	27.25	86.6	5.62	8.81	1471.
500	3.60	34.36	496	27.34	78.5	6.44	12.57	1472.
600	3.39	34.44	595	27.43	70.9	7.19	16.75	1473.
800	3.01	34.56	793	27.55	59.6	8.49	26.02	1475.
1000	2.66	34.64	990	27.65	51.4	9.60	36.15	1477.
1200	2.38	34.68	1188	27.71	46.0	10.58	47.04	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 70

DATE 28/ 7/79

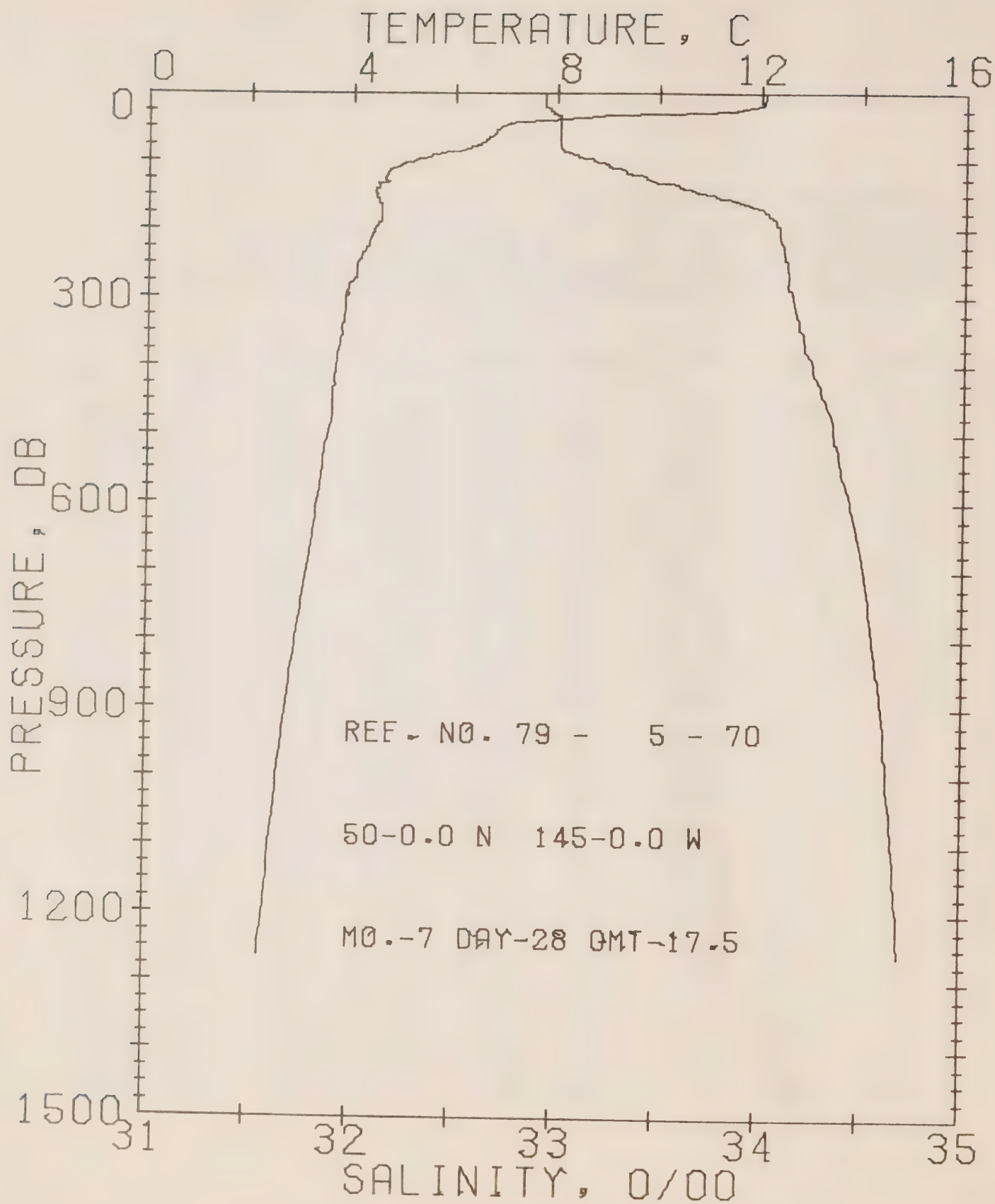
POSITION 50- .0N, 145- .0W GMT 17.5

STATION P

RESULTS OF STP CAST 190 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.08	32.94	0	25.00	296.9	.00	.00	1495.
10	12.06	32.94	10	25.00	296.8	.30	.02	1495.
20	11.82	32.94	20	25.05	292.7	.59	.06	1495.
30	10.28	32.98	30	25.35	263.8	.88	.13	1489.
40	7.67	33.01	40	25.78	222.8	1.11	.22	1480.
50	6.89	33.01	50	25.89	212.6	1.33	.32	1477.
60	6.74	33.01	60	25.91	210.8	1.54	.43	1476.
70	6.59	33.01	70	25.93	209.1	1.75	.57	1476.
80	6.30	33.01	79	25.97	205.2	1.96	.73	1475.
90	5.58	33.09	89	26.12	191.6	2.16	.90	1472.
100	5.18	33.18	99	26.24	180.1	2.34	1.08	1471.
110	4.76	33.28	109	26.37	167.8	2.52	1.27	1470.
120	4.66	33.36	119	26.44	161.1	2.68	1.46	1469.
130	4.70	33.48	129	26.53	152.7	2.84	1.66	1470.
140	4.50	33.62	139	26.66	140.2	2.98	1.86	1469.
150	4.46	33.78	149	26.79	127.8	3.11	2.06	1470.
160	4.52	33.90	159	26.88	119.6	3.24	2.25	1470.
170	4.57	34.00	169	26.96	112.4	3.35	2.45	1471.
180	4.56	34.04	179	26.99	109.4	3.46	2.64	1471.
190	4.49	34.07	189	27.02	106.8	3.57	2.85	1471.
200	4.41	34.09	199	27.04	104.6	3.68	3.06	1471.
210	4.37	34.09	208	27.05	104.2	3.78	3.28	1471.
220	4.33	34.10	218	27.06	103.0	3.89	3.50	1471.
230	4.24	34.11	228	27.08	101.6	3.99	3.74	1470.
240	4.16	34.12	238	27.09	100.0	4.09	3.98	1470.
250	4.09	34.13	248	27.11	98.7	4.19	4.23	1470.
260	4.08	34.13	258	27.11	98.7	4.29	4.48	1470.
270	4.07	34.14	268	27.12	97.9	4.39	4.75	1470.
280	3.91	34.13	278	27.13	97.1	4.48	5.02	1470.
290	3.90	34.14	288	27.14	95.9	4.58	5.30	1470.
300	3.88	34.16	298	27.15	94.7	4.67	5.59	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 70

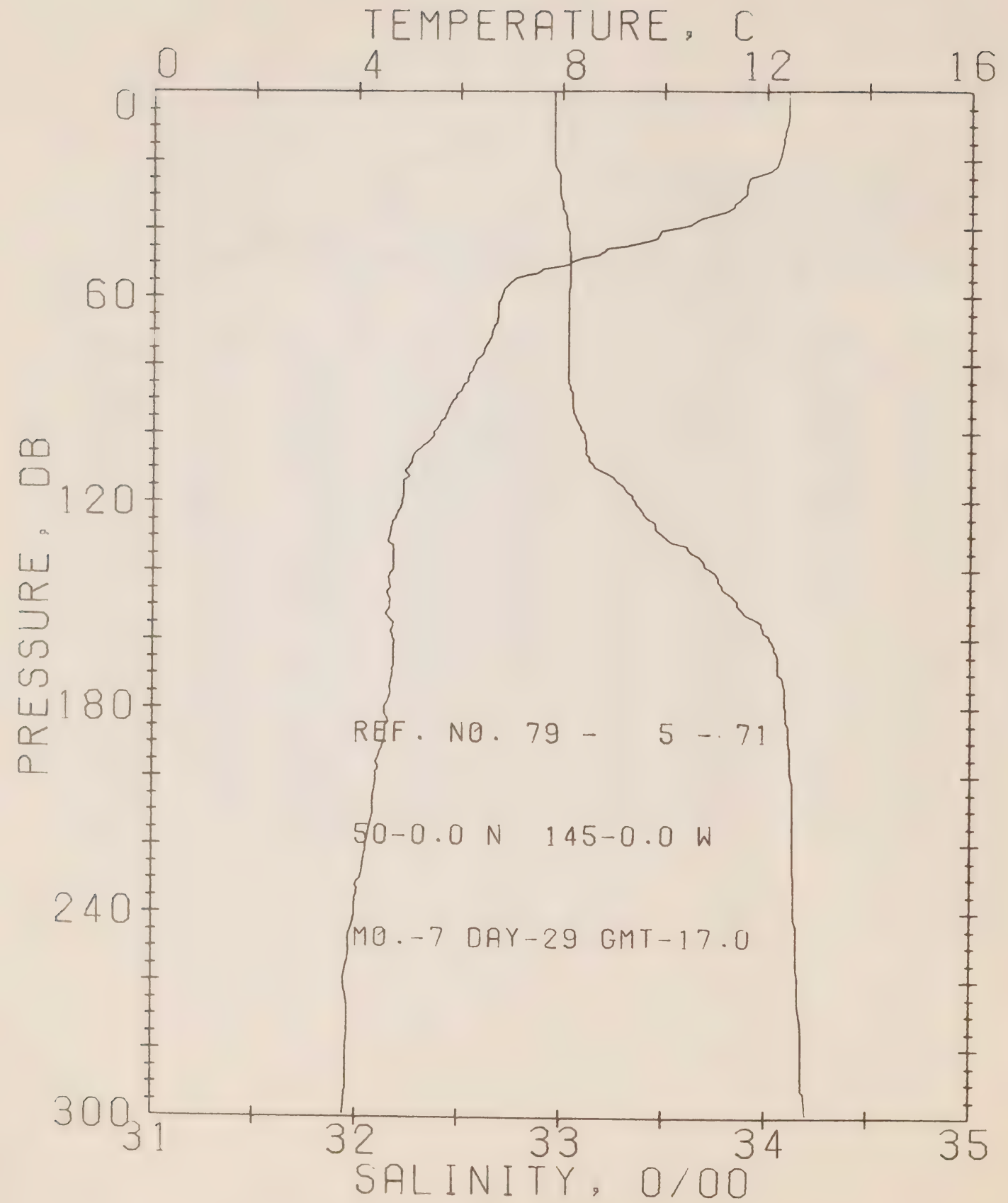
DATE 28/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 290 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.08	32.94	0	25.00	296.9	.00	.00	1495.
10	12.06	32.94	10	25.00	296.8	.30	.02	1495.
20	11.82	32.94	20	25.05	292.7	.59	.06	1495.
30	10.28	32.98	30	25.35	263.8	.88	.13	1489.
50	6.89	33.01	50	25.89	212.6	1.33	.32	1477.
75	6.47	33.01	75	25.95	207.6	1.85	.65	1476.
100	5.18	33.18	99	26.24	180.1	2.34	1.08	1471.
125	4.61	33.44	124	26.51	154.7	2.76	1.56	1469.
150	4.46	33.78	149	26.79	127.8	3.11	2.06	1470.
175	4.57	34.03	174	26.98	110.5	3.41	2.54	1471.
200	4.41	34.09	199	27.04	104.6	3.68	3.06	1471.
225	4.30	34.11	223	27.07	102.1	3.94	3.62	1471.
250	4.09	34.13	248	27.11	98.7	4.19	4.23	1470.
300	3.88	34.16	298	27.15	94.7	4.67	5.59	1470.
400	3.69	34.26	397	27.25	86.2	5.58	8.83	1471.
500	3.54	34.37	496	27.35	77.4	6.40	12.55	1472.
600	3.33	34.45	595	27.44	69.7	7.14	16.68	1473.
800	2.94	34.56	793	27.56	58.8	8.41	25.75	1475.
1000	2.59	34.63	990	27.65	51.2	9.50	35.71	1477.
1200	2.34	34.69	1188	27.72	45.4	10.47	46.51	1479.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 71

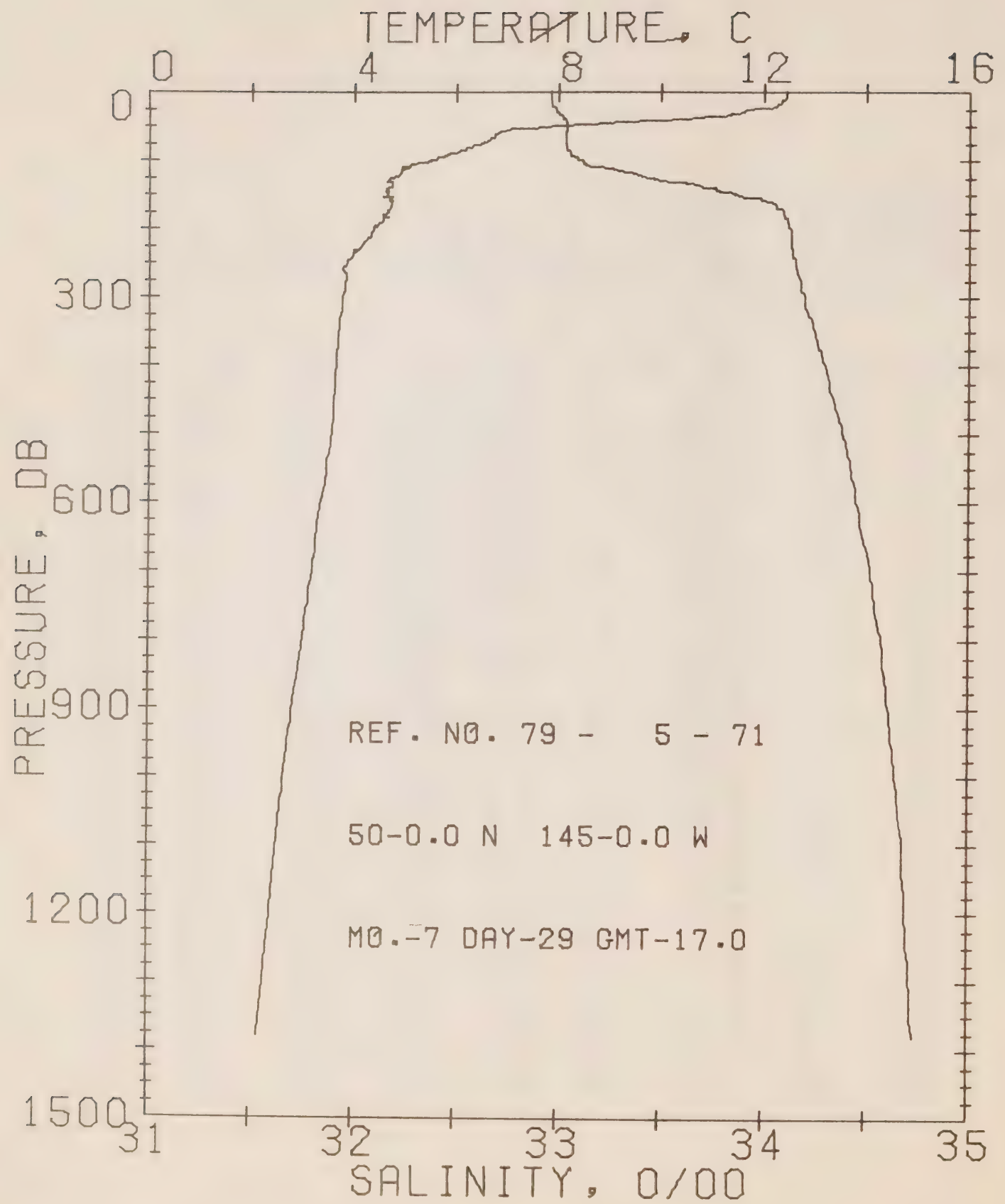
DATE 29/ 7/79

POSITION 50- .0N, 145- .0W GMT 17.0 STATION P

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

GUIDELINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.42	32.96	0	24.95	301.5	.00	.00	1496.
10	12.41	32.96	10	24.95	301.6	.30	.02	1496.
20	12.23	32.96	20	24.99	298.5	.60	.06	1496.
30	11.59	32.99	30	25.13	285.2	.89	.13	1494.
40	10.21	33.03	40	25.40	259.5	1.17	.23	1489.
50	8.16	33.04	50	25.74	227.5	1.41	.34	1482.
60	6.82	33.03	60	25.92	210.4	1.63	.47	1477.
70	6.65	33.03	70	25.94	208.3	1.84	.60	1476.
80	6.30	33.03	80	25.98	204.1	2.04	.76	1475.
90	5.91	33.05	89	26.05	198.1	2.24	.94	1474.
100	5.49	33.11	99	26.15	188.8	2.44	1.12	1472.
110	5.02	33.16	109	26.24	179.9	2.62	1.32	1470.
120	4.89	33.36	119	26.41	163.6	2.79	1.52	1470.
130	4.64	33.50	129	26.55	150.5	2.95	1.72	1470.
140	4.72	33.73	139	26.72	134.3	3.09	1.92	1470.
150	4.64	33.86	149	26.84	123.8	3.22	2.11	1470.
160	4.73	34.02	159	26.95	112.9	3.34	2.29	1471.
170	4.70	34.06	169	26.99	109.7	3.45	2.48	1471.
180	4.54	34.10	179	27.04	105.0	3.55	2.67	1471.
190	4.54	34.11	189	27.04	104.4	3.66	2.87	1471.
200	4.38	34.12	199	27.07	101.8	3.76	3.07	1471.
210	4.31	34.13	208	27.08	100.6	3.86	3.28	1470.
220	4.20	34.13	218	27.10	99.6	3.96	3.50	1470.
230	4.09	34.14	228	27.12	97.7	4.06	3.73	1470.
240	3.98	34.14	238	27.13	96.7	4.16	3.96	1470.
250	3.87	34.15	248	27.15	94.9	4.25	4.20	1469.
260	3.78	34.16	258	27.16	93.3	4.35	4.44	1469.
270	3.84	34.17	268	27.16	93.4	4.44	4.69	1469.
280	3.81	34.18	278	27.18	92.3	4.53	4.95	1470.
290	3.81	34.18	288	27.18	92.4	4.63	5.22	1470.
300	3.77	34.20	298	27.20	90.6	4.72	5.50	1470.



OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 5- 71

DATE 29/ 7/79

POSITION 50- .00N, 145- .00W GMT 17.0 STATION P

RESULTS OF STP CAST 299 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	12.42	32.96	0	24.95	301.5	.00	.00	1496.
10	12.41	32.96	10	24.95	301.6	.30	.02	1496.
20	12.23	32.96	20	24.99	298.5	.60	.06	1496.
30	11.59	32.99	30	25.13	285.2	.89	.13	1494.
50	8.16	33.04	50	25.74	227.5	1.41	.34	1482.
75	6.49	33.03	75	25.96	206.4	1.94	.68	1476.
100	5.49	33.11	99	26.15	188.8	2.44	1.12	1472.
125	4.76	33.43	124	26.48	157.0	2.87	1.62	1470.
150	4.64	33.86	149	26.84	123.8	3.22	2.11	1470.
175	4.68	34.09	174	27.01	107.2	3.50	2.57	1471.
200	4.38	34.12	199	27.07	101.8	3.76	3.07	1471.
225	4.13	34.13	223	27.10	98.9	4.01	3.61	1470.
250	3.87	34.15	248	27.15	94.9	4.25	4.20	1469.
300	3.77	34.20	298	27.20	90.6	4.72	5.50	1470.
400	3.65	34.30	397	27.29	82.8	5.59	8.59	1471.
500	3.57	34.38	496	27.36	76.5	6.38	12.24	1472.
600	3.36	34.45	595	27.44	69.8	7.11	16.31	1473.
800	2.99	34.57	793	27.57	58.5	8.39	25.41	1475.
1000	2.65	34.64	990	27.65	51.1	9.49	35.43	1477.
1200	2.39	34.69	1188	27.71	45.7	10.44	46.14	1479.

Surface Salinity and Temperature Observations

(P-79-5)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 79- 5

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
79	6	15	1900	32.012		123-30
79	6	15	2010	31.947		124- 0
79	6	15	2120	31.819		124-30
79	6	15	2245	31.764		125- 0
79	6	16	100	31.812	12.2	125-33
79	6	16	245	31.984	12.8	126- 0
79	6	16	500	32.115	12.5	126-40
79	6	16	815	31.929	12.5	127-40
79	6	16	1140	32.376	12.8	128-40
79	6	16	1800	32.141	12.5	130-40
79	6	17	6	32.439	11.7	132-40
79	6	17	640	32.446	11.7	134-40
79	6	17	1330	32.398	10.5	136-40
79	6	17	2045	32.509	10.0	138-40
79	6	18	400	32.514	9.8	140-40
79	6	18	1115	32.579	9.5	142-40
79	6	18	1940	32.584	9.3	145- 0
79	6	19	0	32.573	9.3	ON STATION
79	6	20	0	32.575	9.2	ON STATION
79	6	21	0	32.570	9.3	ON STATION
79	6	22	0	32.569	9.5	ON STATION
79	6	23	0	32.577	9.6	ON STATION
79	6	24	0	32.600	10.0	ON STATION
79	6	25	0	32.600	10.1	ON STATION
79	6	26	0	32.598	10.5	ON STATION
79	6	27	0	32.588	10.9	ON STATION
79	6	28	0	32.581	11.4	ON STATION
79	6	29	0	32.584	11.1	ON STATION
79	6	30	0	32.589	10.6	ON STATION
79	7	1	0	32.569*	10.6	ON STATION
79	7	2	0	32.556*	10.7	ON STATION
79	7	3	0	32.581	10.6	ON STATION
79	7	4	0	32.566	10.6	ON STATION
79	7	5	0	32.562	10.7	ON STATION
79	7	6	0	32.559	10.8	ON STATION
79	7	7	0	32.563	10.8	ON STATION
79	7	8	0	32.561	10.9	ON STATION
79	7	9	0	32.591	11.2	ON STATION
79	7	10	0	32.588	11.2	ON STATION
79	7	11	0	32.583	11.7	ON STATION
79	7	12	0	32.579	11.3	ON STATION
79	7	13	0	32.585	11.4	ON STATION
79	7	14	0	32.581	11.6	ON STATION
79	7	15	0	32.591	12.3	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS
CRUISE REFERENCE NUMBER 79- 5

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
79	7	16	0	32.594	11.7	ON STATION
79	7	17	0	32.540	12.1	ON STATION
79	7	18	0	32.566	12.6	ON STATION
79	7	19	0	32.544	12.1	ON STATION
79	7	20	0	32.536	12.2	ON STATION
79	7	21	0	32.549	12.1	ON STATION
79	7	22	0	32.545	12.2	ON STATION
79	7	23	0	32.549	12.6	ON STATION
79	7	24	0	32.540	12.8	ON STATION
79	7	25	0	32.528	12.8	ON STATION
79	7	26	0	32.525	13.0	ON STATION
79	7	27	0	32.535	13.0	ON STATION
79	7	28	0	32.533	12.7	ON STATION
79	7	29	0	32.534	12.9	145- 0
79	7	30	0	32.500	10.6	145- 0
79	7	30	100	32.487	13.6	142-40
79	7	30	730	32.452	12.5	140-40
79	7	30	1345	32.466	13.4	138-40
79	7	30	2020	32.392	14.0	136-40
79	7	31	320	32.452	14.8	134-40
79	7	31	1010	32.452	15.0	132-40
79	7	31	1710	32.533	16.0	130-40
79	7	31	2352	32.018	16.4	128-40
79	8	1	315	31.935	16.8	127-40
79	8	1	645	32.139	14.8	126-40
79	8	1	900	31.736	15.1	126- 0
79	8	1	1035	31.590	13.3	125-33
79	8	1	1225	32.045		125- 0
79	8	1	1420	31.245		124-30
79	8	1	1620	31.004		124- 0
79	8	1	1820	30.903		123-30

* DENOTES SALINITY SAMPLE TAKEN FROM A
BUCKET. ALL OTHER SAMPLES TAKEN FROM
THE SEAWATER LOOP

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